

chain nodes :

4 5 8 9 10 13 14

ring nodes :

1 2 3

chain bonds :

1-9 1-10 2-13 2-14 3-4 3-8 4-5

ring bonds :

1-2 1-3 2-3

exact/norm bonds :

1-2 1-3 1-9 1-10 2-3 2-13 2-14 4-5

exact bonds :

3-4 3-8

G1:H,CH3,Et

G2:C,H,Ph,Cb,Ak,O

Match level :

1:Atom 2:Atom 3:Atom 4:CLASS 5:CLASS 8:CLASS 9:CLASS 10:CLASS 13:CLASS 14:CLASS

10760032-R3 AND R4 NON CICLYC

Connecting via Winsock to STN

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STN Express with Discover!  
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NEWS 5 NOV 30 PHAR reloaded with additional data  
NEWS 6 DEC 01 LISA now available on STN  
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NEWS 8 DEC 15 MEDLINE update schedule for December 2004  
NEWS 9 DEC 17 ELCOM reloaded; updating to resume; current-awareness  
alerts (SDIs) affected  
NEWS 10 DEC 17 COMPUAB reloaded; updating to resume; current-awareness  
alerts (SDIs) affected  
NEWS 11 DEC 17 SOLIDSTATE reloaded; updating to resume; current-awareness  
alerts (SDIs) affected  
NEWS 12 DEC 17 CERAB reloaded; updating to resume; current-awareness  
alerts (SDIs) affected  
NEWS 13 DEC 17 THREE NEW FIELDS ADDED TO IFIPAT/IFIUDE/IFICDB  
NEWS 14 DEC 30 EPFULL: New patent full text database to be available on STN  
NEWS 15 DEC 30 CAPLUS - PATENT COVERAGE EXPANDED  
NEWS 16 JAN 03 No connect-hour charges in EPFULL during January and  
February 2005  
NEWS 17 JAN 26 CA/CAPLUS - Expanded patent coverage to include the Russian  
Agency for Patents and Trademarks (ROSPATENT)  
NEWS 18 FEB 10 STN Patent Forums to be held in March 2005  
  
NEWS EXPRESS JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT  
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005  
  
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NEWS WWW CAS World Wide Web Site (general information)

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10760032-R3 AND R4 NON CICLYC

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COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

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0.21

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STRUCTURE FILE UPDATES: 9 FEB 2005 HIGHEST RN 828241-21-0

DICTIONARY FILE UPDATES: 9 FEB 2005 HIGHEST RN 828241-21-0

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

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Experimental and calculated property data are now available. For more  
information enter HELP PROP at an arrow prompt in the file or refer  
to the file summary sheet on the web at:

<http://www.cas.org/ONLINE/DBSS/registryss.html>

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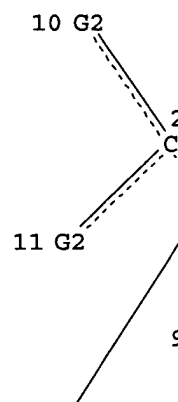
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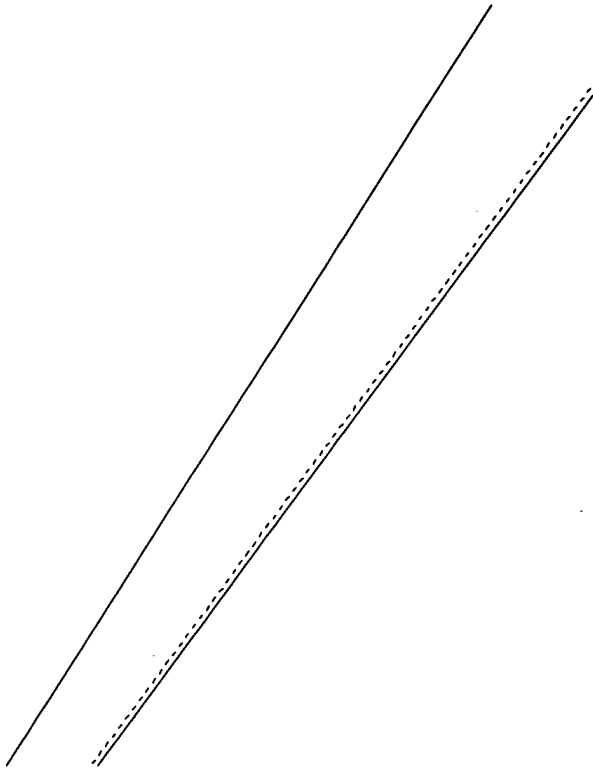
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L1 STR



Page 1-B

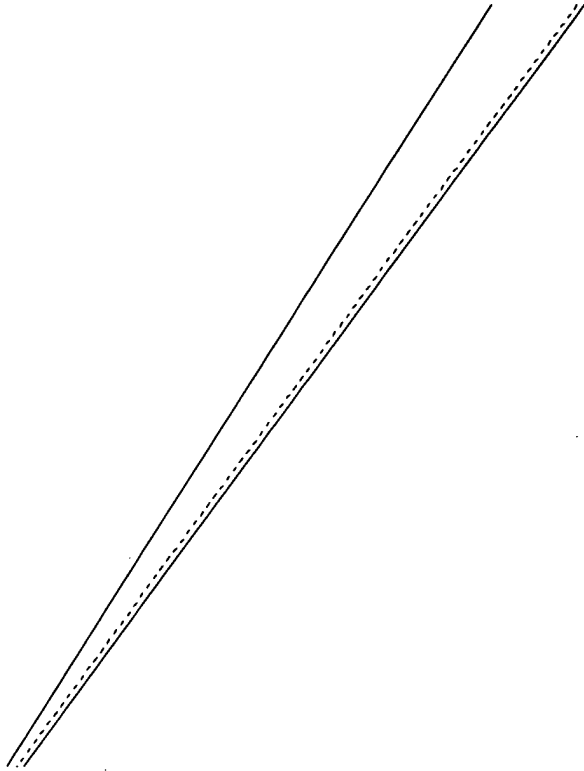
10760032-R3 AND R4 NON CICLYC



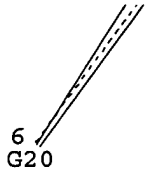
Page 2-A



Page 2-B



Page 3-A



Page 4-A

VAR G1=14/15/16

VAR G2=18/19/20/26/27/28

REP G20=(1-2) 4-3 4-5

NODE ATTRIBUTES:

HCOUNT	IS M2	AT	5
HCOUNT	IS M3	AT	15
HCOUNT	IS M2	AT	16
HCOUNT	IS E3	AT	17
HCOUNT	IS E1	AT	21
HCOUNT	IS E1	AT	22
HCOUNT	IS E1	AT	23
HCOUNT	IS E1	AT	24
HCOUNT	IS E1	AT	25
NSPEC	IS R	AT	1
NSPEC	IS R	AT	2
NSPEC	IS R	AT	3
NSPEC	IS C	AT	4
NSPEC	IS C	AT	5
NSPEC	IS C	AT	6
NSPEC	IS C	AT	7
NSPEC	IS C	AT	8
NSPEC	IS C	AT	9
NSPEC	IS C	AT	10

```

NSPEC      IS C      AT  11
NSPEC      IS C      AT  12
NSPEC      IS C      AT  13
DEFAULT MLEVEL IS ATOM
MLEVEL     IS CLASS  AT   4   5   7  12  13  14  15  16  17  18  19  20  21  22  23  24  25
          26  27  28
DEFAULT ECLEVEL IS LIMITED

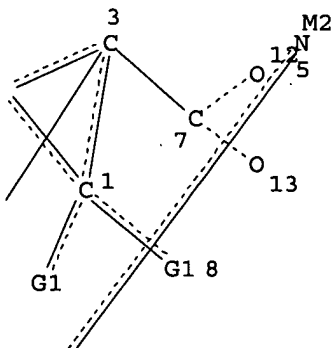
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STEREO ATTRIBUTES: NONE

Diagram of a hexagonal ring structure with vertices labeled C, E1, Cb, Ak, and H. The vertices are connected by dashed lines. The labels are: top (C), top-right (E1), right (Cb), bottom-right (Ak), bottom (H), and bottom-left (C). The edges are labeled with numbers: top-left (23), top (22), top-right (24), right (25), bottom-right (26), and bottom-left (27). The center is labeled 20.

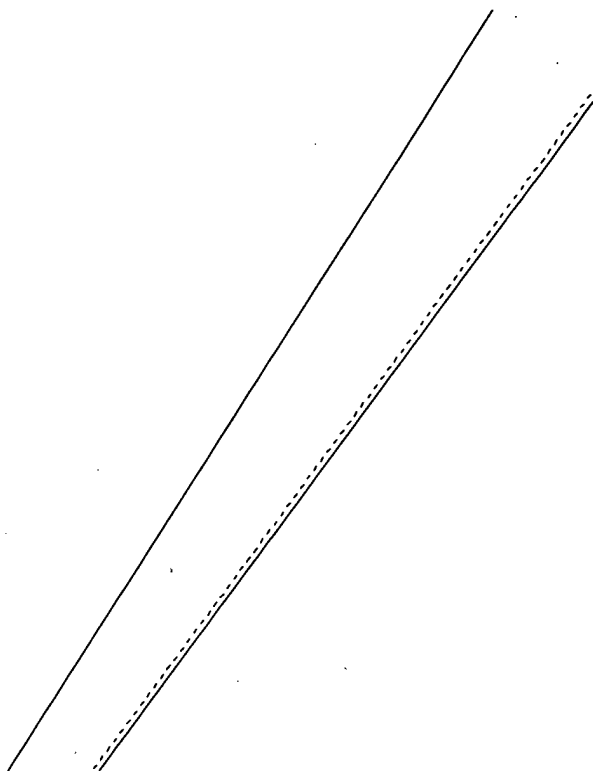
$$\begin{array}{ccccccc} & & 16 & & 17 & & \\ \text{H} & 15 & \text{C} & \text{M3} & \text{C} & \text{---} & \text{C} \\ & & & & \text{M2} & & \text{E3} \end{array}$$


C 4



10760032-R3 AND R4 NON CICLYC

Page 1-B

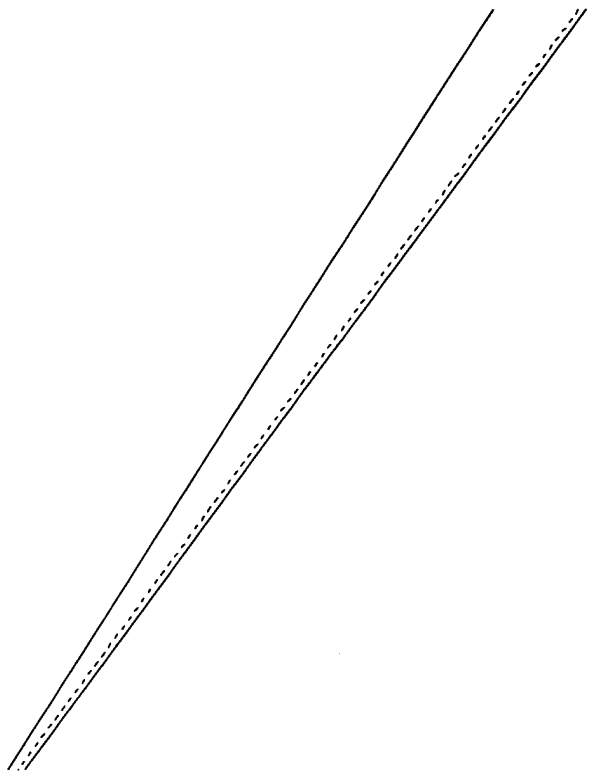


Page 2-A

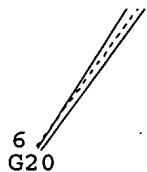


Page 2-B





Page 3-A



Page 4-A

VAR G1=14/15/16

VAR G2=18/19/20/26/27/28

REP G20=(1-2) 4-3 4-5

NODE ATTRIBUTES:

HCOUNT	IS M2	AT	5
HCOUNT	IS M3	AT	15
HCOUNT	IS M2	AT	16
HCOUNT	IS E3	AT	17
HCOUNT	IS E1	AT	21
HCOUNT	IS E1	AT	22
HCOUNT	IS E1	AT	23
HCOUNT	IS E1	AT	24
HCOUNT	IS E1	AT	25
NSPEC	IS R	AT	1
NSPEC	IS R	AT	2
NSPEC	IS R	AT	3
NSPEC	IS C	AT	4
NSPEC	IS C	AT	5
NSPEC	IS C	AT	6
NSPEC	IS C	AT	7
NSPEC	IS C	AT	8
NSPEC	IS C	AT	9
NSPEC	IS C	AT	10

10760032-R3 AND R4 NON CICLYC

NSPEC IS C AT 11  
NSPEC IS C AT 12  
NSPEC IS C AT 13  
DEFAULT MLEVEL IS ATOM  
MLEVEL IS CLASS AT 4 5 7 12 13 14 15 16 17 18 19 20 21 22 23 24 25  
26 27 28  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 28

STEREO ATTRIBUTES: NONE

=> s l1 full  
FULL SEARCH INITIATED 14:57:41 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 5239 TO ITERATE

100.0% PROCESSED 5239 ITERATIONS 65 ANSWERS  
SEARCH TIME: 00.00.01

L2 65 SEA SSS FUL L1

=> file caplus	SINCE FILE	TOTAL
COST IN U.S. DOLLARS	ENTRY	SESSION
FULL ESTIMATED COST	162.19	162.40

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FILE COVERS 1907 - 11 Feb 2005 VOL 142 ISS 7  
FILE LAST UPDATED: 9 Feb 2005 (20050209/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l2 full  
L3 38 L2

=> d 1-38 bib abs hitstr l3

L3 ANSWER 1 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2004:756699 CAPLUS  
DN 141:277627  
TI Preparation of tetrazole and oxadiazolone substituted  $\beta$ -amino acid derivatives as ligands of the  $\alpha 2\delta$ -subunit of a calcium channel



10760032-R3 AND R4 NON CICLYC

IN Barta, Nancy Sue; Colbry, Norman Lloyd; Hudack, Raymond Andrew, Jr.; Lin, Kristin Knapp; Schwarz, Jacob Bradley; Thorpe, Andrew John; Wustrow, David Juergen; Zhu, Zhijian

PA Warner-Lambert Company LLC, USA

SO PCT Int. Appl., 93 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004078734	A1	20040916	WO 2004-IB510	20040223
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	RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	US 2005014804	A1	20050120	US 2004-795760	20040308
PRAI	US 2003-452871P	P	20030307		

OS MARPAT 141:277627

AB Title compds. R2R1(NH2)C-C(G)R3R4 [G = tetrazolyl, 1,3,5-oxadiazol-2-one; R1-2 = H, alkyl, alkoxy, etc.; R3-4 = H, Me; (I)] and related cyclopropane derivs. are prepared For instance, 4-methyl-2-(1H-tetrazol-5-yl)pentylamine is prepared from 1-benzyl-1H-tetrazole and 4-methyl-1-nitropentene in 2 steps. Selected example compds. exhibit binding with nM to  $\mu$ M affinity for  $\alpha$ 2 $\delta$ -subunit of the calcium channel (3 biol. examples). I are useful for the treatment of central nervous system and other disorders.

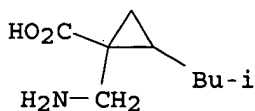
IT 724772-89-8P 724772-90-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of tetrazole and oxadiazolone substituted  $\beta$ -amino acid derivs. as ligands of  $\alpha$ 2 $\delta$ -subunit of a calcium channel for use as CNS agents)

RN 724772-89-8 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-(2-methylpropyl)-, hydrochloride (9CI) (CA INDEX NAME)

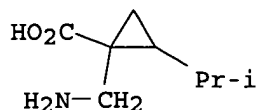


● HCl

RN 724772-90-1 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-(1-methylethyl)-, hydrochloride (9CI) (CA INDEX NAME)

10760032-R3 AND R4 NON CICLYC



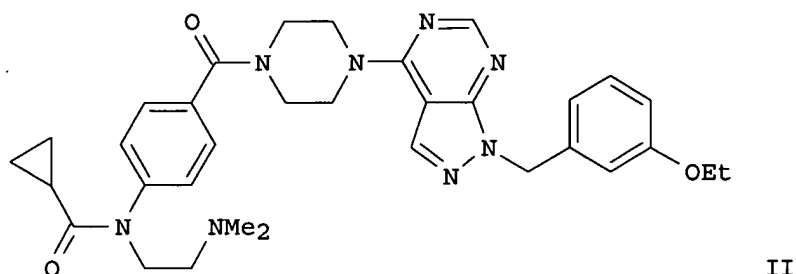
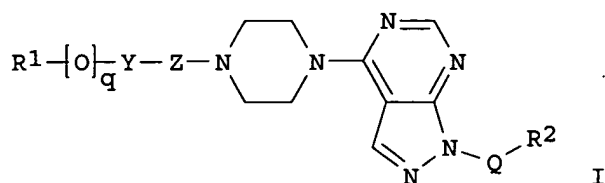
● HCl

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2004:633436 CAPLUS  
DN 141:174191  
TI Preparation of pyrazolopyrimidines as a small conductance potassium  
channel (SK channel) blocking agents  
IN Takamuro, Iwao; Sekine, Yasuo; Tsuboi, Yasunori; Nogi, Kouji; Taniguchi,  
Hiroyuki  
PA Tanabe Seiyaku Co., Ltd., Japan  
SO PCT Int. Appl., 306 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004064721	A2	20040805	WO 2004-JP617	20040123
	WO 2004064721	A3	20040923		
	W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, KE, KE, KG, KG, KP, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI, NI, NO				
PRAI	JP 2003-16770	A	20030124		
	JP 2003-205341	A	20030801		
	JP 2003-385399	A	20031114		
OS	MARPAT 141:174191				
GI					

*Handwritten signatures and initials:*  
DPA  
NPA



AB The title compds. [I; R1 = substituted aryl, (un)substituted nitrogen-containing aliphatic heteromonocyclyl, substituted cycloalkyl, (un)substituted amino, or substituted heteroaryl; R2 = (un)substituted (hetero)aryl; Y = a single bond, alkylene or alkenylene; Z = CO, CH2, SO2, C:N(CN); Q = alkylene; q = 0-1] and their pharmaceutically acceptable salts, which have a small conductance potassium channel (SK channel) blocking activity, were prepared. Thus, treating Et 4-{N-(cyclopropylcarbonyl)-N-[2-(dimethylamino)ethyl]amino}benzoate (preparation given) with 2N NaOH solution followed by treatment with 2N HCl, and the reaction of the resulting acid with 1-(3-ethoxybenzyl)-4-(piperazin-1-yl)-1H-pyrazol[3,4-d]pyrimidine dihydrochloride afforded 84% II which showed an excellent apamin-binding inhibitory activity (IC50 of 0.05  $\mu$ M). The pharmaceutical composition comprising the compound I is claimed.

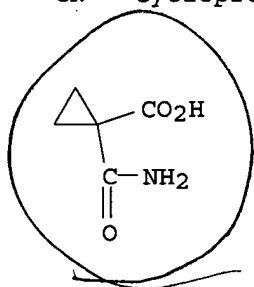
IT 6914-74-5, 1-Carbamoyl-1-cyclopropanecarboxylic acid

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of pyrazolopyrimidines as a small conductance potassium channel (SK channel) blocking agents)

RN 6914-74-5 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)- (9CI) (CA INDEX NAME)



*Mw ≠ C*

L3 ANSWER 3 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:612495 CAPLUS

DN 141:123903

TI Preparation of cyclopropyl  $\beta$ -amino acid derivatives for pharmaceutical use

IN Schwarz, Jacob Bradley; Wustrow, David Juergen

PA ~~USA~~

SO U.S. Pat. Appl. Publ., 22 pp.

CODEN: USXXCO

*Dave Juergen*

10760032-R3 AND R4 NON CICLYC

DT Patent  
LA English  
FAN.CNT 1

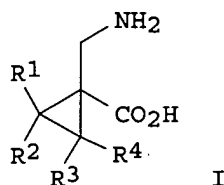
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	WO 2004065361	A2	20040805	WO 2004-IB58	20040109
	WO 2004065361	A3	20041007		
W:	AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI				

PRAI US 2003-441825P P 20030122

OS MARPAT 141:123903

GI

*no prior art*



AB The invention relates to novel cyclopropyl  $\beta$ -amino acids derivs. I [R1 and R2 are H, alkyl, alkoxyalkyl, phenylalkyl or phenylalkoxyalkyl, where the Ph moieties can optionally be substituted with one or two halo or alkyl groups; or R1R2C is cyclopentyl, cyclohexyl or cycloheptyl which can be substituted with one or two groups R1/R2; R3, R4 are H or Me] and pharmaceutical compns. containing them for use in the treatment of central nervous system and other disorders. Compds. I exhibit activity as  $\alpha 2\delta$  ligands and have affinity for the  $\alpha 2\delta$  subunit of a calcium channel. Thus, 1-aminomethylspiro[2.5]octane-1-carboxylic acid hydrochloride was prepared by treating cyanocyclohexylideneacetic acid Et ester with nitromethane in MeCN in the presence of DBU, followed by hydrogenation over Raney Ni and hydrolysis with 3N HCl.

IT 724772-89-8P 724772-90-1P 724772-91-2P  
724772-93-4P 724772-94-5P 724772-95-6P  
724772-96-7P 724772-99-0P 724773-00-6P  
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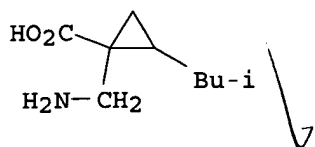
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of cyclopropyl  $\beta$ -amino acid derivs. for pharmaceutical use)

RN 724772-89-8 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-(2-methylpropyl)-, hydrochloride (9CI) (CA INDEX NAME)

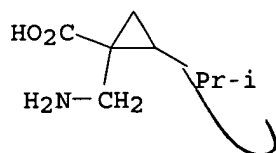
10760032-R3 AND R4 NON CICLYC



● HCl

RN 724772-90-1 CAPLUS

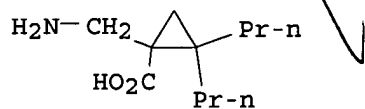
CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-(1-methylethyl)-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

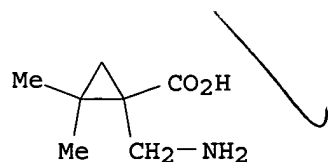
RN 724772-91-2 CAPLUS

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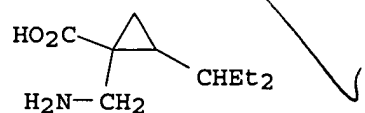
RN 724772-93-4 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2,2-dimethyl- (9CI) (CA INDEX NAME)



RN 724772-94-5 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-(1-ethylpropyl)- (9CI) (CA INDEX NAME)

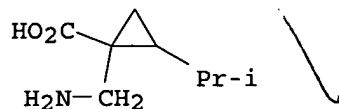


RN 724772-95-6 CAPLUS

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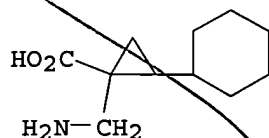
10760032-R3 AND R4 NON CICLYC

INDEX NAME)



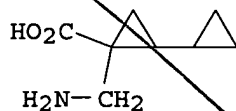
RN 724772-96-7 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-cyclohexyl- (9CI) (CA INDEX NAME)



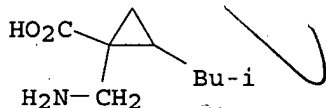
RN 724772-99-0 CAPLUS

CN [1,1'-Bicyclopropyl]-2-carboxylic acid, 2-(aminomethyl)- (9CI) (CA INDEX NAME)



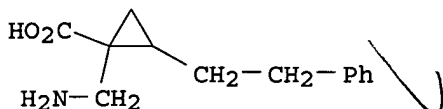
RN 724773-00-6 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-(2-methylpropyl)- (9CI) (CA INDEX NAME)



RN 724773-01-7 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-(2-phenylethyl)- (9CI) (CA INDEX NAME)

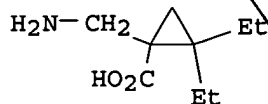


RN 724773-08-4 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2,2-diethyl- (9CI) (CA INDEX NAME)

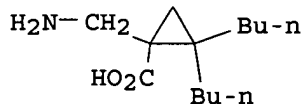


10760032-R3 AND R4 NON CICYC



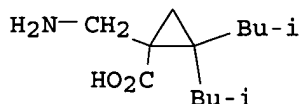
RN 724773-09-5 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2,2-dibutyl- (9CI) (CA INDEX NAME)



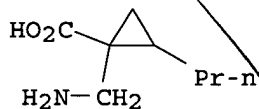
RN 724773-10-8 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2,2-bis(2-methylpropyl)- (9CI) (CA INDEX NAME)



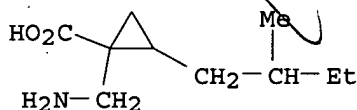
RN 724773-11-9 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-propyl- (9CI) (CA INDEX NAME)



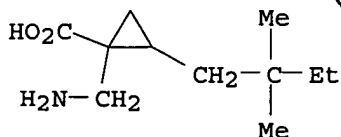
RN 724773-12-0 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-(2-methylbutyl)- (9CI) (CA INDEX NAME)



RN 724773-13-1 CAPLUS

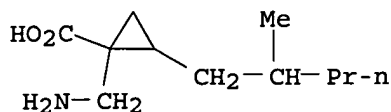
CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-(2,2-dimethylbutyl)- (9CI) (CA INDEX NAME)



10760032-R3 AND R4 NON CICYC

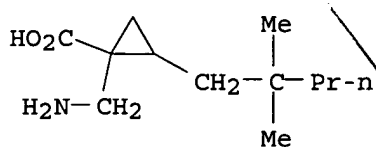
RN 724773-14-2 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-(2-methylpentyl)- (9CI)  
(CA INDEX NAME)



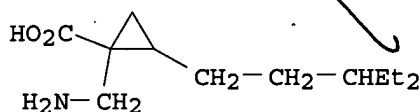
RN 724773-15-3 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-(2,2-dimethylpentyl)- (9CI)  
(CA INDEX NAME)



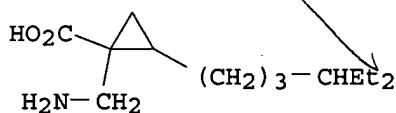
RN 724773-16-4 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-(3-ethylpentyl)- (9CI) (CA  
INDEX NAME)



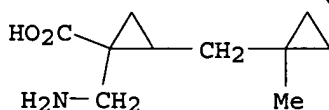
RN 724773-17-5 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-(4-ethylhexyl)- (9CI) (CA  
INDEX NAME)



RN 724773-18-6 CAPLUS

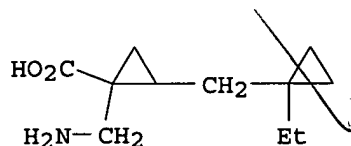
CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-[(1-methylcyclopropyl)methyl]- (9CI) (CA INDEX NAME)



RN 724773-19-7 CAPLUS

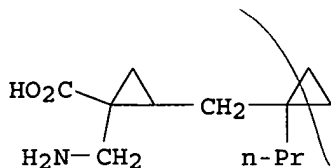
CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-[(1-ethylcyclopropyl)methyl]- (9CI) (CA INDEX NAME)

10760032-R3 AND R4 NON CICYC



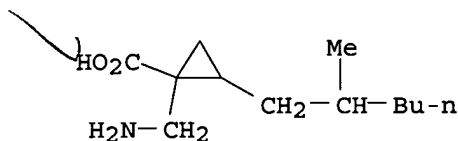
RN 724773-20-0 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-[(1-propylcyclopropyl)methyl]- (9CI) (CA INDEX NAME)



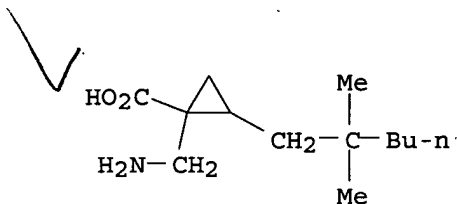
RN 724773-21-1 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-(2-methylhexyl)- (9CI) (CA INDEX NAME)



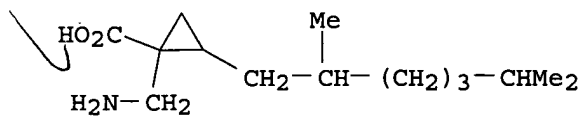
RN 724773-22-2 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-(2,2-dimethylhexyl)- (9CI) (CA INDEX NAME)



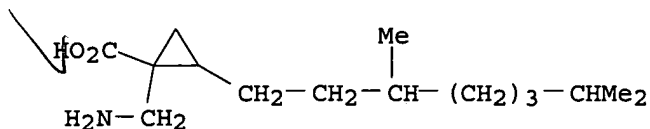
RN 724773-23-3 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-(2,6-dimethylheptyl)- (9CI) (CA INDEX NAME)



RN 724773-24-4 CAPLUS

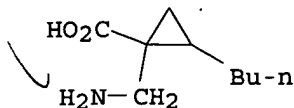
CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-(3,7-dimethyloctyl)- (9CI) (CA INDEX NAME)



10760032-R3 AND R4 NON CICLYC

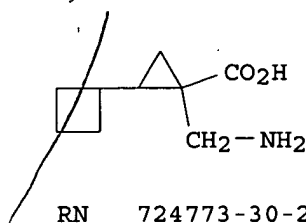
RN 724773-26-6 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-butyl- (9CI) (CA INDEX NAME)



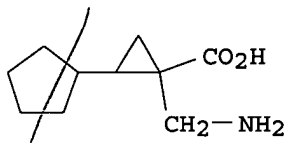
RN 724773-28-8 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-cyclobutyl- (9CI) (CA INDEX NAME)



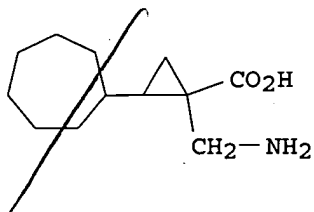
RN 724773-30-2 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-cyclopentyl- (9CI) (CA INDEX NAME)



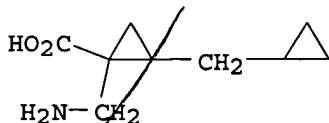
RN 724773-31-3 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-cycloheptyl- (9CI) (CA INDEX NAME)



RN 724773-32-4 CAPLUS

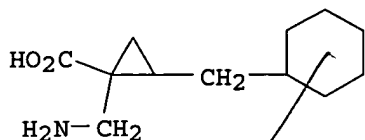
CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-(cyclopropylmethyl)- (9CI) (CA INDEX NAME)



RN 724773-34-6 CAPLUS

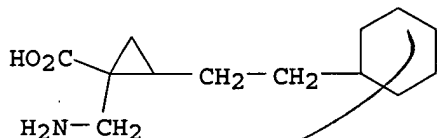
CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-(cyclohexylmethyl)- (9CI) (CA INDEX NAME)

10760032-R3 AND R4 NON CICLYC



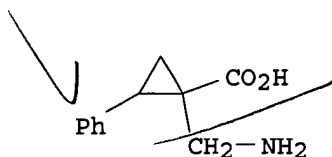
RN 724773-36-8 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-(2-cyclohexylethyl)- (9CI)  
(CA INDEX NAME)



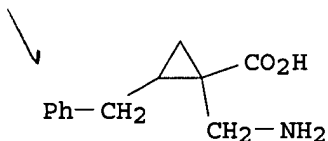
RN 724773-37-9 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-phenyl- (9CI) (CA INDEX NAME)



RN 724773-38-0 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)-2-(phenylmethyl)- (9CI) (CA INDEX NAME)



L3 ANSWER 4 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:534173 CAPLUS

DN 141:89016

TI Preparation of benzimidazolylazabicyclooctylethylpiperidines as Ccr5 antagonists for the treatment of HIV infection

IN Kazmierski, Wieslaw Mieczyslaw; Aquino, Christopher Joseph; Bifulco, Neil; Boros, Eric Eugene; Chauder, Brian Andrew; Chong, Pek Yoke; Duan, Maosheng; Deanda, Felix, Jr.; Koble, Cecilia Suarez; Mclean, Ed Williams; Peckham, Jennifer Poole; Perkins, Angilique C.; Thompson, James Benjamin; Vanderwall, Dana

PA Smithkline Beecham Corporation, USA; et al.

SO PCT Int. Appl., 859 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004054974	A2	20040701	WO 2003-US39644	20031212
	WO 2004054974	A3	20040902		

*m Pst*

10760032-R3 AND R4 NON CICLYC

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2002-433634P P 20021213

OS MARPAT 141:89016

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Compds. I [R1 = (optionally substituted) alkyl, aryl, heteroaryl, carbocyclyl; R2 = H, (optionally substituted) alkyl, aryl, heteroaryl, cycloalkyl, heterocycloalkyl, aralkyl, heteroarylalkyl, heteroarylcycloalkyl, aralkylcarbonyl, heteroarylsulfinyl; R3 = H, halo, cyano, trifluoromethyl, (optionally substituted) amino, acylamino, alkyl; X = C1-5 alkylene, optionally substituted with oxo or thioxo groups or halogen atoms, and optionally containing 1-3 oxygen, nitrogen, sulfur, or phosphorus atoms; Y = carbonyl, thiocarbonyl, 1,2-dioxoethylene, oxyalkylcarbonyl, sulfinyl, sulfonyl, oxycyanoimino, (optionally substituted) aminocarbonyl, carbonylamino, aminothiocarbonyl, oxyiminomethyl, thioiminomethyl, amino(cyanoimino)methyl, (cyanoimino)methyl, amino(acylimino)methyl, amino(sulfonylimino)methyl, amino(sulfinylimino)methyl, amino(alkoxyimino)methyl, amino(imino)methyl, (cyanoimino)methoxy, iminomethoxy, (cyanoimino)methanethiyl, alkylcarbonyloxy; A = saturated, partially saturated, or aromatic monocyclic

ring

with 5-6 atoms or a bicyclic ring with 8-10 members containing 0-5 nitrogen, oxygen, and/or sulfur atoms] such as II are prepared I are prepared as Ccr5 antagonists for the treatment of viral infections, (particularly HIV infection), related syndromes such as AIDS-related complex (ARC), progressive generalized lymphadenopathy, Kaposi's sarcoma, and neurol. conditions, and other diseases such as multiple sclerosis, rheumatoid arthritis, Crohn's disease, and immune-mediated disorders. The invention compds. have pIC50 values of  $\geq 5$  in assays for Ccr5 antagonism.

Piperidineacetaldehyde III is prepared in four steps from 4-phenyl-4-piperidinecarbonitrile by protection of the piperidine with Boc anhydride, reduction of the nitrile with diisobutylaluminum hydride, Wittig olefination with methoxymethylphosphonium chloride, and hydrolysis of the enol ether with catalytic p-toluenesulfonic acid monohydrate. The hydrochloride of endo-(benzimidazolyl)azabicyclooctane IV is prepared in five steps from tert-Bu endo-3-oxo-8-azabicyclo[3.2.1]octane-8-carboxylate; reductive amination with benzylamine, reductive cleavage of the benzyl group by palladium-mediated hydrogenation, a nucleophilic aryl substitution reaction with 1-fluoro-2-nitrobenzene, reduction of the nitro group by hydrogenation over palladium on carbon, and treatment with tri-Et orthoacetate followed by treatment with hydrochloric acid in ethanol.

Coupling of III and IV by reductive amination with sodium triacetoxyborohydride, cleavage of the Boc group with hydrochloric acid in dioxane, and acylation with pivaloyl chloride and triethylamine yields II.

IT 6914-74-5, 1-(Aminocarbonyl)-1-cyclopropanecarboxylic acid

RL: RCT (Reactant); RACT (Reactant or reagent)

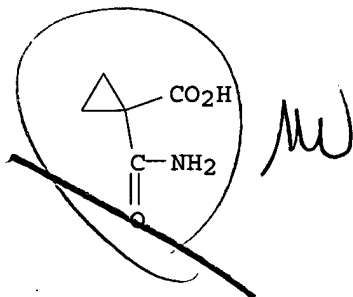
(starting material; preparation of benzimidazolylazabicyclooctylethylpiperidine Ccr5 antagonists in the treatment of bacterial and viral infections

10760032-R3 AND R4 NON CICLYC

and other diseases)

RN 6914-74-5 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)- (9CI) (CA INDEX NAME)



L3 ANSWER 5 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:515503 CAPLUS

DN 141:71452

TI Preparation of pyridine derivatives as JNK inhibitors

IN Kallin, Elisabeth; Plobeck, Niklas; Swahn, Britt-Marie

PA Astrazeneca Ab, Swed.

SO PCT Int. Appl., 98 pp.

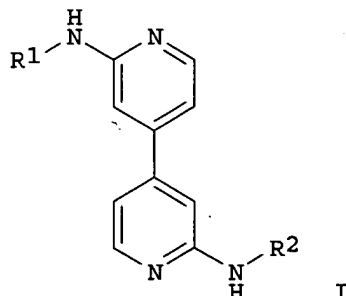
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004052880	A1	20040624	WO 2003-SE1911	20031208
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRAI	SE 2002-3654	A	20021209		
OS	MARPAT 141:71452				
GI					



AB The title compds. [I; R<sub>1</sub> = aryl or heteroaryl, each of which is optionally substituted with one or more of R<sub>3</sub>, OR<sub>3</sub>, OCOR<sub>3</sub>, COOR<sub>3</sub>, COR<sub>3</sub>, CONR<sub>3</sub>R<sub>4</sub>, NHCOR<sub>3</sub>, NR<sub>3</sub>R<sub>4</sub>, NH<sub>2</sub>SO<sub>2</sub>R<sub>3</sub>, SO<sub>2</sub>R<sub>3</sub>, SO<sub>2</sub>NR<sub>3</sub>R<sub>4</sub>, SR<sub>3</sub>, CN, halo, NO<sub>2</sub>; R<sub>2</sub> = R<sub>5</sub>, R<sub>6</sub>, COR<sub>5</sub>, COR<sub>6</sub>, CONHR<sub>5</sub>, CONHR<sub>6</sub>, CON(R<sub>6</sub>)<sub>2</sub>, COOR<sub>5</sub>, COOR<sub>6</sub>, SO<sub>2</sub>R<sub>5</sub>, SO<sub>2</sub>R<sub>6</sub>; R<sub>3</sub>, R<sub>4</sub> = H, alkyl, cycloalkyl, etc.; R<sub>5</sub> = (un)substituted (hetero)aryl; R<sub>6</sub> = H,

10760032-R3 AND R4 NON CICLYC

alkyl, cycloalkyl, etc.], were prepared and formulated. E.g., a 4-step synthesis of N,N'-bis[4-(trifluoromethyl)phenyl]-4,4'-bipyridine-2,2'-diamine, starting from 2-chloropyridine, was given. Typical  $K_i$  values for the compds. I are in the range of about 0.001 to about 10,000 nM in assay for inhibition of JNK3.

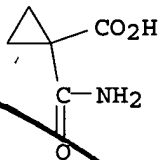
IT 6914-74-5, 1-(Aminocarbonyl)cyclopropanecarboxylic acid

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of 4,4'-bipyridine-2,2'-diamine derivs. as JNK inhibitors)

RN 6914-74-5 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)- (9CI) (CA INDEX NAME)



L3 ANSWER 6 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:972059 CAPLUS

DN 140:27819

TI Preparation of pyrazole derivatives as JNK inhibitors

IN Ohi, Norihito; Sato, Nobuaki; Soejima, Motohiro; Doko, Takashi; Terauchi, Taro; Naoe, Yoshimitsu; Motoki, Takafumi

PA Eisai Co., Ltd., Japan

SO PCT Int. Appl., 561 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

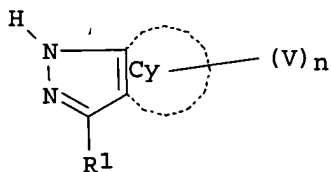
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003101968	A1	20031211	WO 2003-JP6777	20030529
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RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRAI JP 2002-158467 A 20020531

JP 2003-153 A 20030106

OS MARPAT 140:27819

GI



AB The title compds. I [R<sub>1</sub> represents (CO)<sub>h</sub>(NRA)<sub>j</sub>(CRb:CRc)<sub>k</sub>Ar (wherein Ra,



10760032-R3 AND R4 NON CICLYC

Rb, and Rc each independently represents hydrogen, halogeno, hydroxy, optionally substituted C1-6 alkyl, etc.); Ar = (un)substituted aromatic heterocyclic ring, etc.; h, j, k = 0 or 1; Cy is a 5- or 6-membered aromatic heterocycle; and V represents L-X-Y (wherein L is a single bond, optionally substituted C1-6 alkylene, etc.; X is a single bond, O, CO, etc.; and Y is hydrogen, halogeno, nitro, etc.); n = 0 - 4] are prepared Compds. of this invention in vitro showed IC50 values of 63 nM to 578 nM against JNK-3.

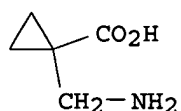
IT 139126-45-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of pyrazole derivs. as JNK inhibitors)

RN 139126-45-7 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)- (9CI) (CA INDEX NAME)



*use other Refers  
leading same compound!*

RE.CNT 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:950974 CAPLUS

DN 140:16567

TI N-(Acylamino)benzene derivatives as selective monoamine oxidase B inhibitors

IN Jolidon, Synese; Rodriguez Sarmiento, Rosa Maria; Thomas, Andrew William; Wyler, Rene

PA F. Hoffmann-La Roche A.-G., Switz.

SO PCT Int. Appl., 52 pp.

CODEN: PIXXD2

DT Patent

LA English

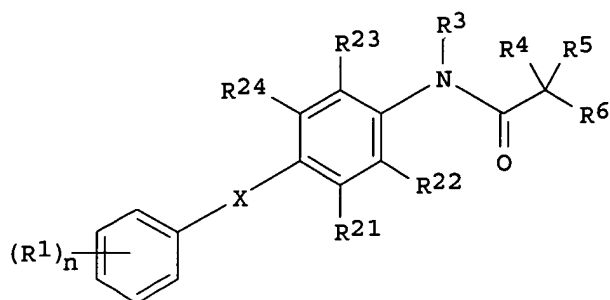
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003099763	A1	20031204	WO 2003-EP5297	20030521
	WO 2003099763	C1	20040318		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	US 2003232883	A1	20031218	US 2003-445580	20030527
	US 6762320	B2	20040713		
	US 2004210079	A1	20041021	US 2004-839514	20040505
PRAI	EP 2002-11639	A	20020529		
	US 2003-445580	A1	20030527		

OS MARPAT 140:16567

GI

*NRA*



I

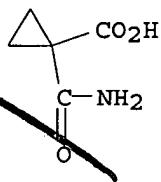
AB Title compds. such as I ( $R_1$  = halo, haloalkyl, cyano, alkoxy, haloalkoxy;  $n = 0, 1, 2, 3$ ;  $X = CH_2O, OCH_2, CH_2CH_2, CH:CH, C.tplbond.C$ , etc.;  $R_{21}, R_{22}, R_{23}, R_{24} = H$ , alkyl, halo, haloalkyl, OH, etc.;  $R_3 = H$ , alkyl;  $R_4, R_5 = H$ , alkyl, alkoxy, alkoxycarbonyl, etc.;  $R_6 = CONR_7R_8$ , alkoxycarbonyl, CN, etc.;  $R_7, R_8 = H$ , alkyl,  $NH_2$ , OH) were prepared. Thus, 4-(3-FC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>O)C<sub>6</sub>H<sub>4</sub>NHCOCH<sub>2</sub>CO<sub>2</sub>Me was prepared in 3 steps starting from 3-fluorobenzyl alc. and 1-fluoro-4-nitrobenzene. Several I were selective monoamine oxidase B inhibitors and are therefore useful in the treatment of diseases such as Alzheimer's disease and senile dementia.

IT 6914-74-5

RL: RCT (Reactant); RACT (Reactant or reagent)  
(prereactant with aniline derivative; acylanilides as monoamine oxidase B inhibitors)

RN 6914-74-5 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)- (9CI) (CA INDEX NAME)



RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 8 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:221465 CAPLUS

DN 138:255249

TI Preparation of piperazine and homopiperazine compounds useful in the treatment of thrombosis and to inhibit ADP-mediated platelet aggregation

IN Levy, Daniel E.; Smyth, Mark S.; Scarborough, Robert M.

PA Millennium Pharmaceuticals, Inc., USA

SO PCT Int. Appl., 260 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

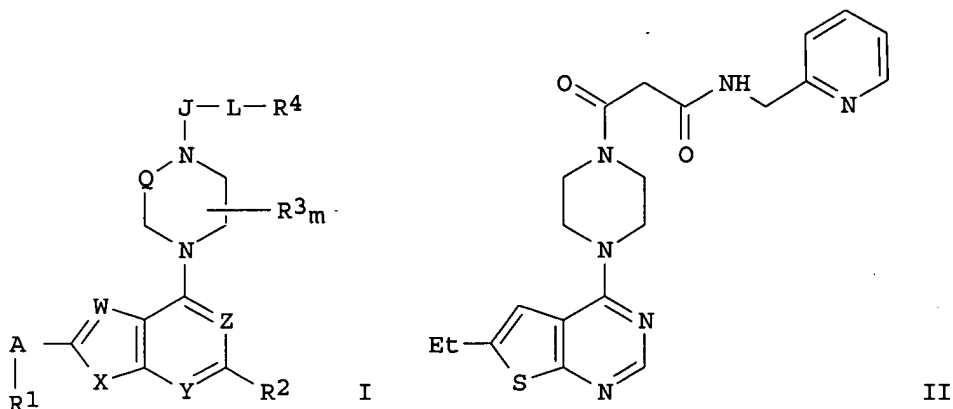
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003022214	A2	<del>20030320</del>	WO 2002-US28618	20020906
	WO 2003022214	A3	20040325		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,				

*NR*

10760032-R3 AND R4 NON CICLYC

PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,  
UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,  
CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003153556 A1 20030814 US 2002-237153 20020906  
PRAI US 2001-317192P P 20010906  
OS MARPAT 138:255249  
GI



AB Piperazine and homopiperazine compds. I, wherein Q is (CH<sub>2</sub>)<sub>n</sub>; n is 1, 2; m is 0-4; W is N, CR<sub>5</sub>; X is S, O, NR<sub>6</sub>; Y is N, CR<sub>7</sub>; Z is N, CR<sub>8</sub>; J is CO, CS, CNR<sub>9</sub>, SO, SO<sub>2</sub>; A is O, S, NR<sub>10</sub>, CO, CH(OH); L is a direct link or a divalent linker; R<sub>1</sub> is H, halo, CN, NO<sub>2</sub>, N<sub>3</sub>, alkyl, cycloalkyl, alkene, alkyne; R<sub>2</sub> is H, halo, CN, NO<sub>2</sub>, N<sub>3</sub>, alkyl, cycloalkyl, alkene, alkyne, acyl; R<sub>3</sub> is alkyl, cycloalkyl, acyl; R<sub>4</sub> is H, F, CF<sub>3</sub>, CN, N<sub>3</sub>, NO<sub>2</sub>, alkyl, amino, alkylamino, cycloalkyl, heterocycloalkyl, heteroalkyl, fused bicycloalkyl, fused bicycloalkaryl, fused bicycloaryl; R<sub>5</sub>-R<sub>8</sub> are independently H, alkyl, cycloalkyl; R<sub>9</sub> is H, CN, NO<sub>2</sub>, alkyl; R<sub>10</sub> is H, alkyl, acyl; are provided having a piperazine or homopiperazine ring which are useful in the treatment of thrombosis. Thus piperazine II was prepared and tested in vitro to inhibit ADP-mediated platelet aggregation (activity ranges are: > 20 μmol; 10-20 μmol; and < 10 μmol).

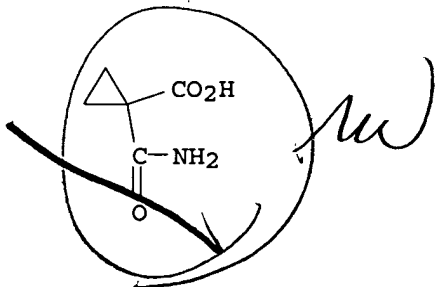
IT 6914-74-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of piperazine and homopiperazine compds. useful in treatment of thrombosis and to inhibit ADP-mediated platelet aggregation)

RN 6914-74-5 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)- (9CI) (CA INDEX NAME)



DN 138:204936  
TI Preparation of heterocyclic comps. as integrase inhibiting antiviral agents

IN Kiyama, Ryuichi; Kanda, Yasuhiko; Tada, Yukio; Fujishita, Toshio;  
Kawasuj, Takashi; Takechi, Shozo; Fuj, Masahiro

PA Shionogi & Co., Ltd., Japan

SO PCT Int. Appl., 663 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

PAN. CNT 1

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

PI WO 2003016275 A1 20030227 WO 2002-JP8108 20020808

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TZ, UA, UG, US, VZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1422218 A1 20040526 EP 2002-749384 20020808  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, SK, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

BR 2002011750 A 20041013 BR 2002-11750 20020808  
US 2004229909 A1 20041118 US 2004-485394 20040130

PRAI JP 2001-245071 A 20010810  
JP 2001-370860 A 20011205  
JP 2002-191483 A 20020628  
WO 2002-JP8108 W 20020808

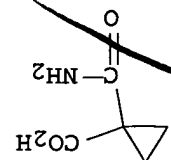
OS MARPAT 138:204936  
AB The title comps. RDC(Z):C(Y):CRCRA [RC and RD in combination form a ring with the adjacent carbon atoms, provided that the ring may be a fused ring; Y represents hydroxy, mercapto, or amino; Z represents oxygen, sulfur, or NH; and RA represents N-containing aromatic heterocycle, etc.] are prepared comps. of this invention in vitro showed IC50 values of 0.12

IT 6914-74-5, 1-(Aminocarbonyl)-1-cyclopropanecarboxylic acid  
µg/mL to 2.9 µg/mL against integrase. Formulations are given.  
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of heterocyclic comps. as integrase inhibiting antiviral agents)

RN 6914-74-5 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)- (9CI) (CA INDEX NAME)



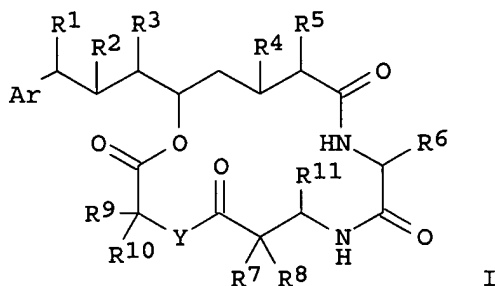
RE. CNT 9  
THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

10760032-R3 AND R4 NON CICLYC

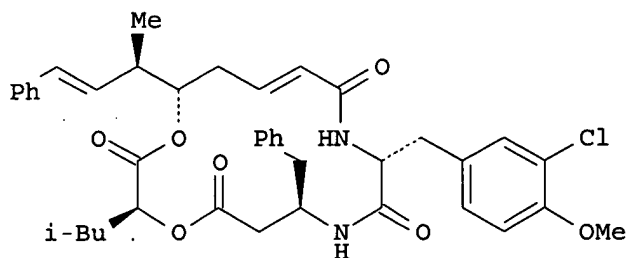
DN 137:232915  
TI Preparation of cryptophycin compounds as pharmaceuticals  
IN Shih, Chuan  
PA USA  
SO U.S. Pat. Appl. Publ., 44 pp., Cont.-in-part of U.S. Ser. No. 495,670.  
CODEN: USXXCO

DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002128185	A1	20020912	US 2001-990895	20011116
PRAI	US 1998-29186	B2	19980225		
	US 1998-29188	B2	19980225		
	US 1998-29203	B2	19980225		
	US 2000-495670	A2	20000201		
OS	MARPAT 137:232915				
GI					



I



II

AB The invention provides novel cryptophycin compds. I [Ar = Ph which may be substituted by OH, alkoxy, halogen, or alkyl; R1 = halo and R2 = OH or R1R2 = O or a bond; R3 = alkyl; R4, R5 = H or together form a bond; R6 = benzyl, hydroxy-, alkoxy-, halohydroxy-, dihalohydroxy-, haloalkoxy-, or dihaloalkoxybenzyl; R7, R8 = H or together form a spiro group; R9 = H or alkyl; R10 = H; Y = O or NH] or pharmaceutically acceptable salts, which can can disrupt the microtubulin system of the cytoskeleton and are useful as antineoplastic or antifungal agents and for the treatment of cancer. The invention further provides a formulation for administering the novel cryptophycin compds. Thus, compound II was prepared via esterification, deprotection, and lactamization reactions. Compds. I were tested for cytotoxicity and antitumor activity.

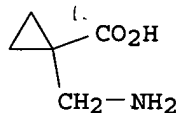
IT 139126-45-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of cryptophycin compds. as pharmaceuticals)

RN 139126-45-7 CAPLUS

10760032-R3 AND R4 NON CICLYC

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)- (9CI) (CA INDEX NAME)



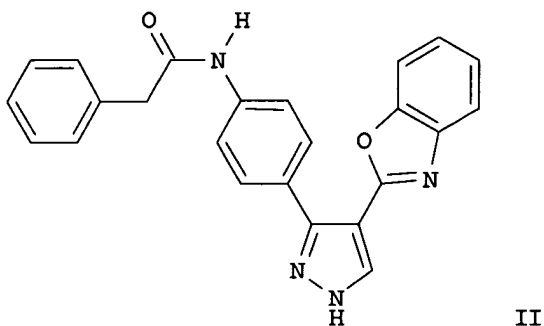
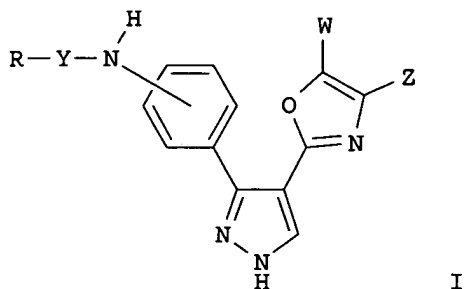
112

L3 ANSWER 11 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2002:615623 CAPLUS  
DN 137:169517  
TI Oxazolyl-pyrazole derivatives as protein kinase inhibitors, their preparation and combinatorial libraries, and their pharmaceutical use in the treatment of cancer and other diseases and disorders  
IN Berta, Daniela; Felder, Eduard; Vulpetti, Anna; Villa, Marzia  
PA Pharmacia Italia S.p.A., Italy  
SO PCT Int. Appl., 107 pp.  
CODEN: PIXXD2

DT Patent  
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002062804	A1	20020815	WO 2002-EP995	20020128
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	CA 2437260	AA	20020815	CA 2002-2437260	20020128
	EP 1377589	A1	20040107	EP 2002-714136	20020128
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
	JP 2004520394	T2	20040708	JP 2002-563156	20020128
	US 2004180881	A1	20040916	US 2004-470859	20040415
PRAI	GB 2001-2687	A	20010202		
	WO 2002-EP995	W	20020128		
OS	MARPAT 137:169517				
GI					



- AB The method of treating protein kinase-linked diseases with oxazolyl-pyrazole derivs. I and their pharmaceutically acceptable salts is disclosed [wherein: R = H, alkyl, alkenyl, aryl, arylalkyl, (un)saturated cycloalkyl or cycloalkyloxy optionally condensed with 1 or 2 benzene rings, or optionally benzo-condensed 5- or 6-membered heterocyclyl or heterocyclylalkyl having 1 or 2 N/O/S atoms [all optionally substituted by one or more of: halo, NO<sub>2</sub>, cyano, OH, oxo, alkyl, alkoxyalkyl, perfluoroalkyl, (un)substituted aryl or 5- or 6-membered heterocyclyl having 1 or 2 N/O/S atoms, alkoxy, alkoxyalkyloxy, (un)substituted arylalkyloxy or aryloxy, alkylthio, alkylsulfonyl, arylthio, or arylsulfonyl, cycloalkyl, amino, alkylamino, dialkylamino, arylamino, alkylcarbonyl, alkyloxycarbonyl, alkylaminocarbonyl, aminocarbonyl, (un)substituted arylcarbonyl or heterocyclylcarbonyl, alkylcarbonylamino, alkyloxycarbonylamino, arylalkyloxycarbonylamino, arylcarbonylamino, aryloxycarbonylamino, carboxy, alkylcarbonyloxy, or arylcarbonyloxy]; Y = bond, CO, NHCO, SO<sub>2</sub>; WZ = benzo fusion, naphtho fusion, or an optionally benzocondensed 5- or 6-membered heterocycle having 1 or 2 N/O/S atoms, each optionally substituted by one or more of halo, nitro, cyano, alkyl, alkoxy, alkylsulfonyl, or aryl]. Also disclosed is a novel subset of I, including 382 individually named compds. I are useful in the treatment of diseases caused by and/or associated with an altered protein kinase activity, such as cancer, cell proliferative disorders, viral infections, autoimmune diseases and neurodegenerative disorders. Eleven examples are given, including solid-phase preparation of several compds. I and intermediates, and descriptions of 3 combinatorial libraries of 3874, 3172, and 2184 members, based on 4 claimed tables of reactants. For instance, Et 3-(3-nitrophenyl)pyrazole-4-carboxylate was bound to trityl chloride resin, saponified with NaOH in MeOH, and amidated with o-aminophenol. The resultant N-(2-hydroxyphenyl)amide was cyclized by Mitsunobu reaction to give a 1,3-benzoxazole derivative, followed by reduction of the nitro group to amino using SnCl<sub>2</sub>, amidation with PhCH<sub>2</sub>CO<sub>2</sub>H, and resin cleavage with TFA, to give title compound II. Inhibition assays against various kinases are described (no data).
- IT **6914-74-5**, 1-(Aminocarbonyl)-1-cyclopropanecarboxylic acid  
 RL: CRT (Combinatorial reactant); RCT (Reactant); CMBI (Combinatorial

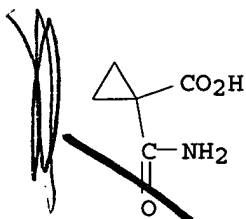
10760032-R3 AND R4 NON CICLYC

study); RACT (Reactant or reagent)

(combinatorial reactant; preparation of oxazolylypyrazole derivs. as protein kinase inhibitors, and their combinatorial libraries and use as anticancer agents)

RN 6914-74-5 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)- (9CI) (CA INDEX NAME)



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 12 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:349172 CAPLUS

DN 136:355479

TI Reductive amination of alpha-keto-dicarboxylic acids

IN Rossen, Kai; Sarich, Martin; Latinovic, Milan; Rollmann, Claudia; Bommarius, Andreas

PA Degussa Aktiengesellschaft, Germany

SO Eur. Pat. Appl., 11 pp.

CODEN: EPXXDW

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1203821	A2	20020508	EP 2001-125184	20011024
	EP 1203821	A3	20040630		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	DE 10054492	A1	20020516	DE 2000-10054492	20001103
	JP 2002199895	A2	20020716	JP 2001-334859	20011031
	US 2002081671	A1	20020627	US 2001-985475	20011105
PRAI	DE 2000-10054492	A	20001103		

OS CASREACT 136:355479; MARPAT 136:355479

AB A process is provided for the reductive amination of a-keto-dicarboxylic acids by the enzymes amino acid dehydrogenase, leucine dehydrogenase or phenylalanine dehydrogenase. These enzymic reactions are coupled to the enzymic dehydrogenation of formate by formate dehydrogenase to regenerate the NADH required for the reductive amination.

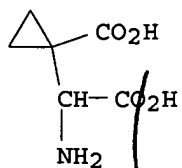
IT 421548-64-3P

RL: BMF (Bioindustrial manufacture); BPN (Biosynthetic preparation); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation)

(reductive amination of alpha-keto-dicarboxylic acids)

RN 421548-64-3 CAPLUS

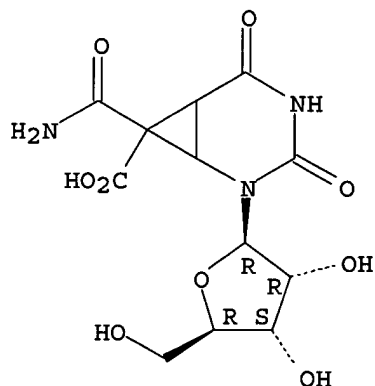
CN Cyclopropaneacetic acid,  $\alpha$ -amino-1-carboxy- (9CI) (CA INDEX NAME)





L3 ANSWER 13 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2002:194991 CAPLUS  
 DN 136:355413  
 TI Synthesis of some antimicrobial pyrimidine nucleoside derivatives  
 AU El Bahnasawy, A. A.; Ahmed, A. F. Sayed; Koraiem, A. I. M.  
 CS Department of Chemistry, Faculty of Science, Zagazig University, Egypt  
 SO Aswan Science & Technology Bulletin (2001), 20, 46-60  
 CODEN: ASTBEQ; ISSN: 1110-0184  
 PB Aswan Faculty of Science  
 DT Journal  
 LA English  
 OS CASREACT 136:355413  
 AB Reactions of both of 6-chlorocytidine and 6-chlorouridine with ethylcyanoacetate were carried out under basic conditions to form cyclopropane derivs. Further alkaline reactions of these derivs. has been done. On the other hand, oxidation of hydroxamic acids in the presence of both of 5-bromo (hydroxy)-4-chloro(methoxy) pyrimidinone nucleoside afford cycloaddn. products. Reductive cleavage of the N-O bond of some produced cyclo adducts has been performed. The biol. activities of the prepared compds. towards gram-pos. and gram-neg. bacteria have been described.  
 IT 420805-09-0P  
 RL: BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis of antimicrobial pyrimidine nucleoside derivs. via cycloaddn and reductive bond cleavage)  
 RN 420805-09-0 CAPLUS  
 CN 2,4-Diazabicyclo[4.1.0]heptane-7-carboxylic acid, 7-(aminocarbonyl)-3,5-dioxo-2- $\beta$ -D-ribofuranosyl- (9CI) (CA INDEX NAME)

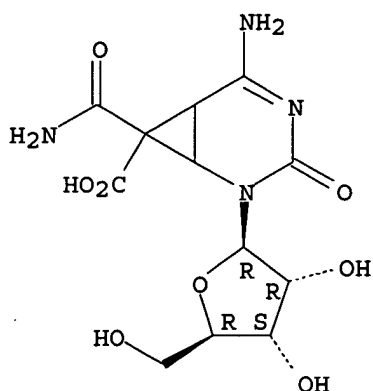
Absolute stereochemistry.



IT 420805-04-5P  
 RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);  
 BIOL (Biological study); PREP (Preparation)  
 (synthesis of antimicrobial pyrimidine nucleoside derivs. via cycloaddn and reductive bond cleavage)  
 RN 420805-04-5 CAPLUS  
 CN 2,4-Diazabicyclo[4.1.0]hept-4-ene-7-carboxylic acid, 5-amino-7-(aminocarbonyl)-3-oxo-2- $\beta$ -D-ribofuranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

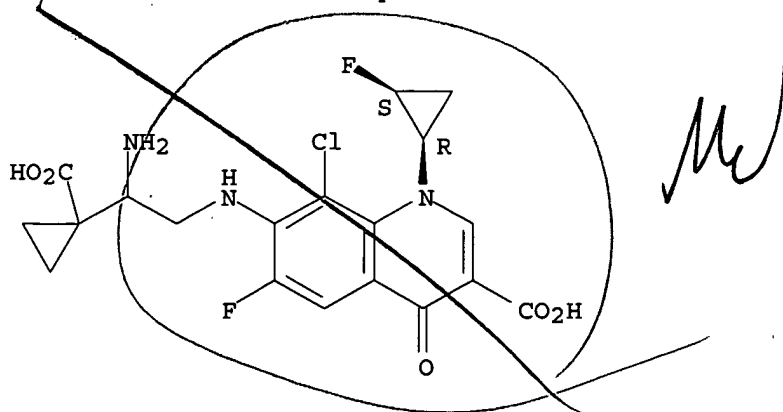
10760032-R3 AND R4 NON CICLYC



RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

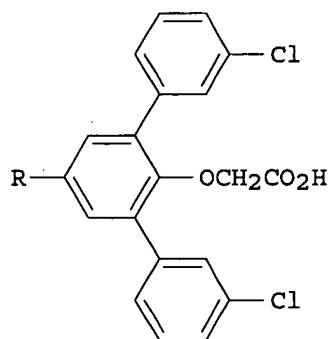
L3 ANSWER 14 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2001:443690 CAPLUS  
DN 136:241033  
TI Structure study on sitafloxacin metabolites by LC/MS/MS  
AU Xu, Xiaoping; Wang, Shu; He, Yingju; Chen, Cong; Nakaoa, Minoru  
CS School of Pharmacy, West China University of Medical Sciences, Chengdu, 610041, Peop. Rep. China  
SO Zhongguo Kangshengsu Zazhi (2001), 26(2), 108-111  
CODEN: ZKZAEY; ISSN: 1001-8689  
PB Zhongguo Kangshengsu Zazhishe  
DT Journal  
LA Chinese  
AB Online identification of metabolites of sitafloxacin by LC/MS/MS was presented. The metabolites were confirmed by comparing with its authentic compds. by MS or MS/MS. The structures of metabolites D2-7 were identified as 7-R-8-chloro-1,4-dihydro-6-fluoro-1-(2-fluoro-1-cyclopropyl)-4-oxoquinoline-3-carboxylic acid (R = 7-oxo-5-azaspiro[2.4]hept-5-yl, 7-hydroxy-5-azaspiro[2.4]hept-5-yl, 7-acetamido-5- azaspiro[2.4]hept-5-yl, 2-acetamido-3-(1,2-ethylene)-4-hydroxybutylamino, or 3-carboxy-3-(1,2-ethylene)propylamino). The results showed that sitafloxacin was biotransformed with oxidation path way eliminated by liver microsomes.  
IT 404566-29-6  
RL: PKT (Pharmacokinetics); BIOL (Biological study)  
(structure study on sitafloxacin metabolites by LC/MS/MS)  
RN 404566-29-6 CAPLUS  
CN 3-Quinolinecarboxylic acid, 7-[[2-amino-2-(1-carboxycyclopropyl)ethyl]aminol]-8-chloro-6-fluoro-1-[(1R,2S)-2-fluorocyclopropyl]-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



L3 ANSWER 15 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2001:255930 CAPLUS  
 DN 134:280608  
 TI Preparation of bi- and terphenylcarboxamides as protein tyrosine  
 phosphatase inhibitors  
 IN Butera, John A.; Caufield, Craig E.; Graceffa, Russell F.; Greenfield,  
 Alexander; Gundersen, Eric G.; Havran, Lisa Marie; Katz, Alan H.; Lennox,  
 Joseph R.; Mayer, Scott C.; McDevitt, Robert E.  
 PA USA  
 SO U.S., 75 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6214877	B1	20010410	US 1999-307850	19990510
	US 2001018525	A1	20010830	US 2001-771469	20010126
	US 6451827	B2	20020917		
	US 2003083341	A1	20030501	US 2002-215438	20020809
	US 6765021	B2	20040720		
	US 2004214869	A1	20041028	US 2004-843026	20040511
PRAI	US 1998-108154P	P	19980512		
	US 1999-307850	A3	19990510		
	US 2001-771469	A3	20010126		
	US 2002-215438	A3	20020809		
OS	MARPAT 134:280608				
GI					



II

AB R1OZR [I; R = OH, alkyl, alkoxy, (hetero)aryl(alkyl), ureido, etc.; R1 =  
 H, (carboxy)alkyl, etc.; Z = (un)substituted 2-aryl-1,4-phenylene] were  
 prepared Thus, 4-(HO)C<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>Et was brominated and the iodinated product  
 etherified by HOCH<sub>2</sub>CH<sub>2</sub>OH to give Et 3-bromo-4-(2-hydroxyethoxy)-5-  
 iodobenzoate which was arylated by 3-ClC<sub>6</sub>H<sub>4</sub>B(OH)<sub>2</sub> and the product amidated  
 by dodecylamine to give, after saponification, title compound II [R =  
 Bu(CH<sub>2</sub>)<sub>8</sub>NHCO].

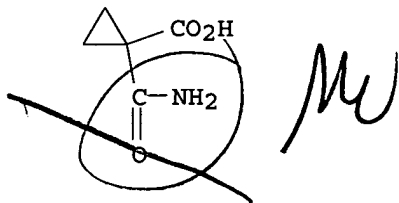
Data for biol. activity of I were given.

IT 6914-74-5

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of bi- and terphenylcarboxamides as protein tyrosine  
 phosphatase inhibitors)

RN 6914-74-5 CAPLUS

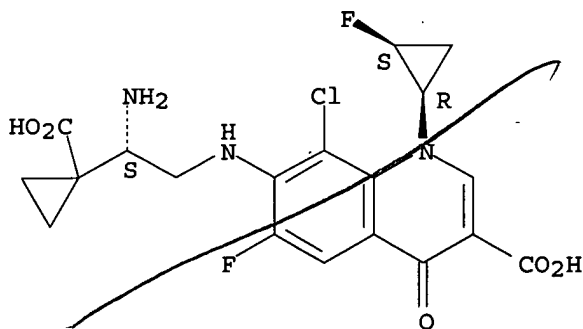
CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)- (9CI) (CA INDEX NAME)



RE.CNT 112 THERE ARE 112 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 16 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2001:242125 CAPLUS  
DN 135:70548  
TI Simultaneous identification and separation of sitafloxacin metabolites by LC-MS  
AU Xu, Xiao-ping; Wang, Shu; Chen, Cong; Nakaoka, Minoru  
CS School of Pharmacy, West China University of Medical Sciences, Chengdu, 610041, Peop. Rep. China  
SO Zhongguo Kangshengsu Zazhi (2000), 25(6), 424-427  
CODEN: ZKZAEY; ISSN: 1001-8689  
PB Zhongguo Kangshengsu Zazhishe  
DT Journal  
LA Chinese  
AB Sitafloxacin metabolites were simultaneously separated and identified by LC-MS. After being administered with sitafloxacin, the urine and bile samples of rat, dog, monkey and human were determined resp. Nine metabolites (M1-M9) of sitafloxacin were identified. It is not only valuable for studying the metabolism of sitafloxacin but also provides structural candidate for developing new fluoroquinolones.  
IT 347887-06-3  
RL: ANT (Analyte); PEP (Physical, engineering or chemical process); ANST (Analytical study); PROC (Process)  
(simultaneous identification and separation of sitafloxacin metabolites by LC-MS)  
RN 347887-06-3 CAPLUS  
CN 3-Quinolonecarboxylic acid, 7-[[[(2S)-2-amino-2-(1-carboxycyclopropyl)ethyl]amino]-8-chloro-6-fluoro-1-[(1R,2S)-2-fluorocyclopropyl]-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L3 ANSWER 17 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2000:725485 CAPLUS  
DN 133:296658

10760032-R3 AND R4 NON CICLYC

TI Preparation of desleucyl glycopeptide antibiotics  
IN Kahne, Daniel; Walker, Suzanne; Silva, Domingos J.  
PA The Trustees of Princeton University, USA; Incara Pharmaceuticals, Inc.  
SO PCT Int. Appl., 150 pp.  
CODEN: PIXXD2

DT Patent  
LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000059528	A1	20001012	WO 2000-US8559	20000331
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2370782	AA	20001012	CA 2000-2370782	20000331
	EP 1173193	A1	20020123	EP 2000-919942	20000331
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 6518243	B1	20030211	US 2000-540761	20000331
	US 2004110665	A1	20040610	US 2003-361603	20030211
PRAI	US 1999-127516P	P	19990402		
	US 2000-540761	A1	20000331		
	WO 2000-US8559	W	20000331		

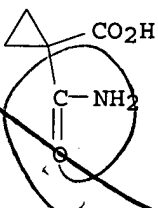
AB Comps. that are analogs of glycopeptide antibiotics are disclosed. The compds. have the formula A1-A2-A3-A4-A5-A6-A7, where each of the groups A2 to A7 is a modified or unmodified  $\alpha$ -amino acid residue, A1 is optional and, when present, is an organic group other than N-substituted leucine, and at least one of the groups A1 to A7 is linked via a glycosidic bond to one or more glycosidic groups each having one or more sugar residues, where at least one of said sugar residues is modified to bear at least one hydrophobic substituent. Methods of making these compds., compns. including these compds., and methods of using the compds. to treat infections in a host are also disclosed. Antibacterial test data are tabulated for > 350 compds. of the invention.

IT 6914-74-5

RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation of desleucyl glycopeptide antibiotics)

RN 6914-74-5 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)- (9CI) (CA INDEX NAME)



RE.CNT 5

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 18 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:764010 CAPLUS

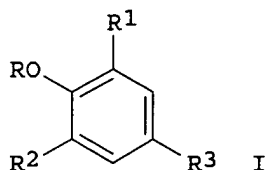
DN 132:12200

TI Preparation of terphenyloxyalkanoic acids and analogs as protein-tyrosine

10760032-R3 AND R4 NON CICLYC

phosphatase inhibitors  
IN Butera, John Anthony; Caufield, Craig Eugene; Graceffa, Russell Francis;  
Greenfield, Alexander; Gundersen, Eric Gould; Havran, Lisa Marie; Katz,  
Alan Howard; Lennox, Joseph Richard; Mayer, Scott Christian; McDevitt,  
Robert Emmett  
PA American Home Products Corporation, USA  
SO PCT Int. Appl., 277 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9961410	A1	19991202	WO 1999-US10158	19990510
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2331056	AA	19991202	CA 1999-2331056	19990510
	AU 9940727	A1	19991213	AU 1999-40727	19990510
	EP 1077929	A1	20010228	EP 1999-924158	19990510
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO				
	JP 2002516305	T2	20020604	JP 2000-550819	19990510
PRAI	US 1998-76709	A	19980512		
	WO 1999-US10158	W	19990510		
OS	MARPAT 132:12200				
GI					

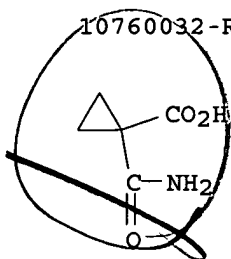


AB Title compds. [I; R = H, alkyl, SO<sub>2</sub>ZCO<sub>2</sub>H, CH<sub>2</sub>CO<sub>2</sub>H, (hetero)arylmethyl, etc.; R<sub>1</sub>, R<sub>2</sub> = H, halo, alkyl, (hetero)aryl, etc.; R<sub>3</sub> = alkyl, (hetero)aryl(alkyl), alkoxy(methyl), (un)substituted CONH<sub>2</sub>, etc.; Z = hydroxyphenyl] were prepared Thus, Et 2-bromo-4-(2-hydroxyethoxy)-5-iodobenzoate was condensed with 3-ClC<sub>6</sub>H<sub>4</sub>B(OH)<sub>2</sub> and the product amidated by dodecylamine to give, after oxidation, I (R = CH<sub>2</sub>CO<sub>2</sub>H, R<sub>1</sub> = R<sub>2</sub> = C<sub>6</sub>H<sub>4</sub>Cl-3, R<sub>3</sub> = dodecylcarbonyl). Data for biol. activity of I were given.

IT 6914-74-5  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation of substituted biphenyl-, aryl, and terphenyloxyalkanoic acids as inhibitors for protein-tyrosine phosphatases in treatment of insulin resistance and hyperglycemia)

RN 6914-74-5 CAPLUS  
CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)- (9CI) (CA INDEX NAME)

10760032-R3 AND R4 NON CICLYC



*M*

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 19 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 1998:165493 CAPLUS  
DN 128:217640  
TI Preparation of novel cryptophycins as microtubulin-disrupting antitumor  
and antifungal agents  
IN Al-Awar, Rima S.; Ehlhardt, William J.; Gottumukkala, Subbaraju V.;  
Martinelli, Michael J.; Moher, Eric D.; Moore, Richard E.; Munroe, John  
E.; Norman, Bryan H.; Patel, Vinod F.; et al.  
PA Eli Lilly and Company, USA; University of Hawaii; Wayne State University;  
Al-Awar, Rima S.; Ehlhardt, William J.; Gottumukkala, Subbaraju V.;  
Martinelli, Michael J.; Moher, Eric D.; Moore, Richard E.  
SO PCT Int. Appl., 87 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9808506	A1	19980305	WO 1997-US15245	19970829
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	WO 9707798	A1	19970306	WO 1996-US13855	19960830
	W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI				
	CA 2263420	AA	19980305	CA 1997-2263420	19970829
	AU 9743300	A1	19980319	AU 1997-43300	19970829
	EP 957912	A1	19991124	EP 1997-941379	19970829
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
	JP 2001502297	T2	20010220	JP 1998-511080	19970829
PRAI	WO 1996-US13855	A	19960830		
	US 1997-38989P	P	19970226		
	US 1997-39529P	P	19970303		
	US 1995-2935P	P	19950830		
	WO 1997-US15245	W	19970829		
OS	MARPAT 128:217640				
GI					

102(6)

*Clear*  
*1 band 3*

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB This invention provides novel cryptophycin compds. I [G = C1-12 alkyl, C2-12 alkenyl, (un)substituted aryl or heteroaryl; R1 = halo, SR, OR, NH2, mono- or di-C1-6 alkylamino, tri-C1-6 alkylammonium, C1-6 alkylthio, di-C1-6 alkylsulfonium, C1-6 alkylsulfonyl, C1-6 alkylphosphonyl, R2 = OH, NH2, NR, SH; R1R2 = form double bond, 3-membered ring; R = H, C1-6 alkyl; R3 = lower alkyl; R4, R5 = H, double bond; R6 = (un)substituted C1-6 alkyl, C3-8 cycloalkyl, heteroaryl, aryl, alkylaryl; R7 = H, lower alkyl, C1-3 alkyl-NR51R52, OR51; R8 = H, lower alkyl; or R7R8 form cyclopropyl ring; R51, R52 = independently C1-3 alkyl; R9 = H, lower alkyl, unsatd. lower alkyl, lower alkyl-C3-5 cycloalkyl; R10 = H, lower alkyl; or R9R10 form cyclopropyl ring; R11 = H, OH, alkyl, Ph, substituted Ph, CH2Ph, substituted CH2Ph; R14 = H, lower alkyl; R30 = H, C1-6 alkyl; X = O, NH, alkylamino; Y = O, NH, alkylamino; with provisos] and pharmaceutically acceptable salts thereof, useful for disrupting the microtubulin system, as antineoplastic agents, antifungal agents, and for the treatment of cancer. The invention further provides a formulation for administering the novel cryptophycin compds. Thus, coupling of cyclopropanecarboxylic acid II (Boc = CO2CMe3) (preparation given) with cryptophycin fragment III, followed by deprotection, cyclization, and chlorohydrin formation gave novel cryptophycin IV. Compds. of this invention are useful against pathogenic fungi and were evaluated against a broad spectrum of murine and human tumors implanted in mice, including drug-resistant tumors.

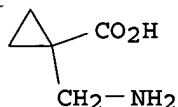
IT 139126-45-7P, LY 257141

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of novel cryptophycins as microtubulin-disrupting antitumor and antifungal agents)

RN 139126-45-7 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)- (9CI) (CA INDEX NAME)



*same compound!*

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 20 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:151085 CAPLUS

DN 128:256692

TI The cycloalkane derivatives and carboxylic acid derivatives for preservation of cut flower

IN Sugiyama, Nagiyoshi; Oritani, Takayuki

PA Otsuka Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10059801	A2	19980303	JP 1997-163402	19970604
PRAI	JP 1996-166706	A	19960605		

AB Freshness of cut flower is preserved with cycloalkane derivs. and/or carboxylic acid derivs. The method is low in cost, free of environmental pollution, and highly effective.

IT 6914-74-5 139126-45-7

102(B)

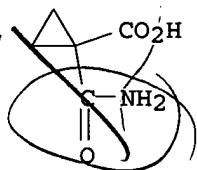


10760032-R3 AND R4 NON CICLYC

RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)  
(cycloalkane derivs. and carboxylic acid derivs. for preservation of  
cut flower)

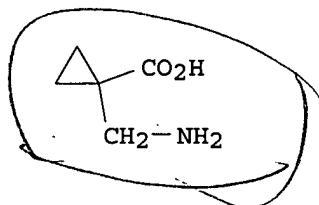
RN 6914-74-5 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)- (9CI) (CA INDEX NAME)



RN 139126-45-7 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminomethyl)- (9CI) (CA INDEX NAME)



web/ Daniel

L3 ANSWER 21 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:764140 CAPLUS

DN 128:102358

TI Stereospecific synthesis of naturally-occurring 4-alkylideneglutamic  
acids, 4-alkylglutamates and 4-alkylprolines 1

AU Moody, Claire M.; Young, Douglas W.

CS CPES, Sussex Centre for Biomolecular Design and Drug Development,  
University of Sussex, Falmer, Brighton, BN1 9QJ, UK

SO Journal of the Chemical Society, Perkin Transactions 1: Organic and  
Bio-Organic Chemistry (1997), (23), 3519-3530

CODEN: JCPRB4; ISSN: 0300-922X

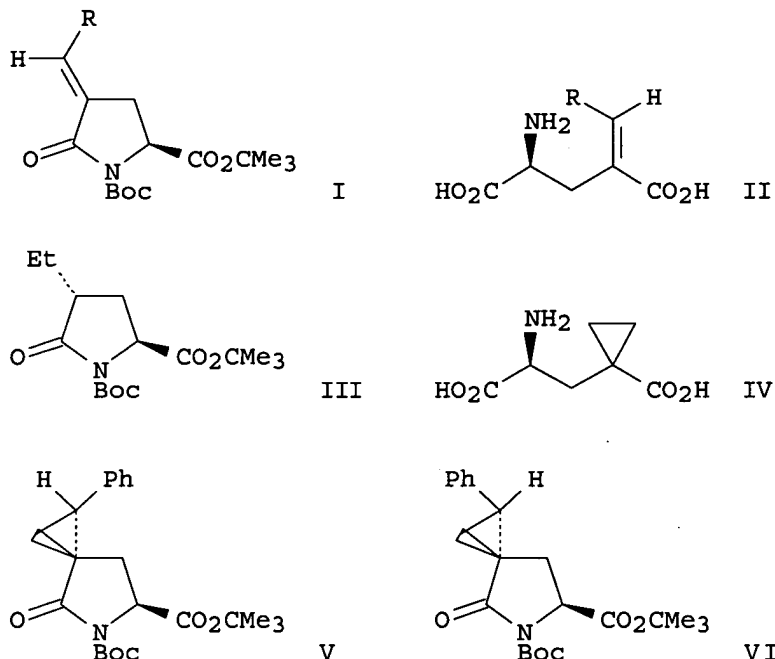
PB Royal Society of Chemistry

DT Journal

LA English

OS CASREACT 128:102358

GI



AB The enaminone I (R = NMe<sub>2</sub>), prepared from L-pyrogutamic acid, reacts with DIBAL and Grignard reagents in an apparent 1,4-manner to afford a variety of alkylidene derivs. I (R = H, Me, Et, Ph, C.tplbond.CH, CH:CH<sub>2</sub>) which, except for the vinyl derivs. , are formed only as the E-isomers. Three of these have been converted to the 4-alkylideneglutamic acids II (R = H, Me, Et), which are identical to known natural products, the synthesis confirming II (R = Me, Et) as the E-isomers. Catalytic reduction of the 4-alkylidenepyrogutamate derivs. I is stereospecific and affords an effective route to (2S,4S)-4-alkylglutamic acids and (2S,4S)-4-alkylprolines. Cuprate addition to the enone I (R = H) affords access to the (2S,4R)-epimer III and carbene addition allows cyclopropylglutamic acids IV-VI to be prepared

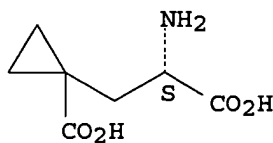
IT 158196-44-2P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(stereospecific synthesis of naturally-occurring 4-alkylideneglutamic acids, 4-alkylglutamates and 4-alkylprolines)

RN 158196-44-2 CAPLUS

CN Cyclopropanepropanoic acid,  $\alpha$ -amino-1-carboxy-, hydrochloride, (S)-  
(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



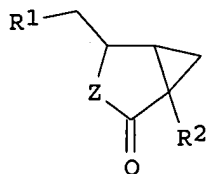
● HCl

RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

10760032-R3 AND R4 NON CICLYC

L3 ANSWER 22 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 1997:502305 CAPLUS  
DN 127:135716  
TI Preparation of 2-oxo-3-oxabicyclo[3.1.0]hexane-1-carboxamides and -amines  
as synthetic intermediates  
IN Kleemis, Wolfgang  
PA Huels AG, Germany; Degussa AG  
SO Ger. Offen., 13 pp.  
CODEN: GWXXBX  
DT Patent  
LA German  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19600034	A1	19970703	DE 1996-19600034	19960102
	DE 19600034	C2	20031224		
PRAI	DE 1996-19600034		19960102		
OS	MARPAT 127:135716				
GI					

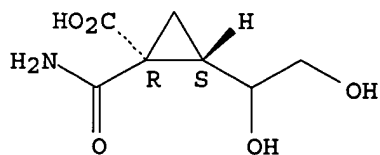


AB Title compds. [I; R1 = OH or acyloxy; R2 = CONH2 or (un)substituted NH2; Z = O, S, (un)substituted imino] were prepared Thus, cis-Me 1-carbamoyl-2-vinylcyclopropanecarboxylate was treated with H2O2 and the resulting glycol heated to give 92.5% I (R1 = OH, R2 = CONH2, Z = O) in a 75:25 diastereomeric ratio.

IT 192947-89-0P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of 2-oxo-3-oxabicyclo[3.1.0]hexane-1-carboxamides and -amines as synthetic intermediates)

RN 192947-89-0 CAPLUS  
CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)-2-(1,2-dihydroxyethyl)-, (1 $\alpha$ ,2 $\alpha$ )-[partial]- (9CI) (CA INDEX NAME)

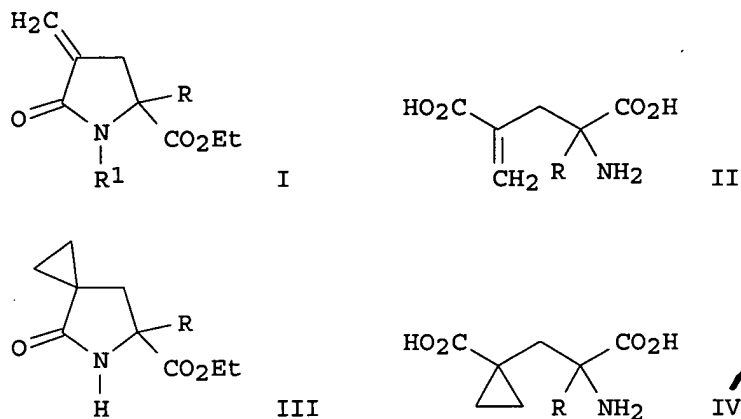
Relative stereochemistry.



L3 ANSWER 23 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 1997:130876 CAPLUS  
DN 126:238627  
TI Synthesis of 2-substituted 4-methyleneglutamic acids and their cyclopropyl analogs  
AU Guillena, Gabriela; Mico, Irene; Najera, Carmen; Ezquerra, Jesus; Pedregal, Concepcion

10760032-R3 AND R4 NON CICYLC

CS Fac. Ciencias, Univ. Alicante, Alicante, 03080, Spain  
 SO Anales de Quimica International Edition (1996), 92(6), 362-369  
 CODEN: AQIEFZ  
 PB Springer  
 DT Journal  
 LA English  
 OS CASREACT 126:238627  
 GI

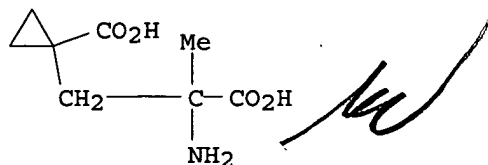


AB The alkylation of the dianion derived from 4-methylenepyroglutamate I (R = R1 = H) allows the synthesis of 2-substituted 4-methyleneglutamates I (R = Me, CH<sub>2</sub>CH:CH<sub>2</sub>, CH<sub>2</sub>CHMe<sub>2</sub>, CH<sub>2</sub>Ph, CH<sub>2</sub>CH<sub>2</sub>Ph; R1 = Boc), after final N-Boc protection. Substituted I can also be prepared by alkylation at the 2-position of the dianion derived from Et pyroglutamate, followed by methylenation at the 4-position and final N-Boc protection. Hydrolysis of substituted methylene derivs. I led to the preparation of 2-substituted 4-methyleneglutamic acids II. The cyclopropanation of 2-alkylated-4-methylenepyroglutamates I (R1 = H) with diazomethane catalyzed by Pd(OAc)<sub>2</sub> affords the cyclopropyl analogs III, which are converted into the corresponding 2-substituted 4,4-ethyleneglutamic acids IV.

IT 188548-29-0P 188548-30-3P 188548-31-4P  
 188548-32-5P 188548-33-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of substituted methyleneglutamic acids and their cyclopropyl analogs)

RN 188548-29-0 CAPLUS

CN Cyclopropanepropanoic acid, α-amino-1-carboxy-α-methyl- (9CI)  
 (CA INDEX NAME)

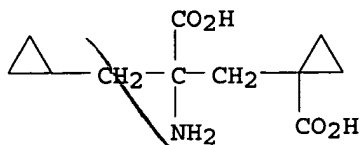


RN 188548-30-3 CAPLUS

CN Cyclopropanepropanoic acid, α-amino-1-carboxy-α-

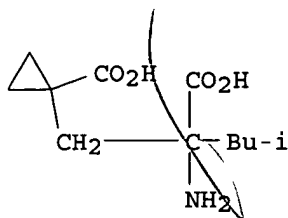
10760032-R3 AND R4 NON CICLYC

(cyclopropylmethyl)- (9CI) (CA INDEX NAME)



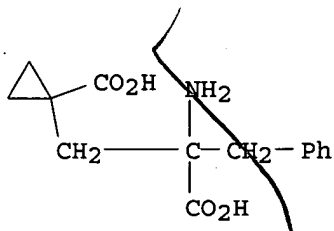
RN 188548-31-4 CAPLUS

CN Cyclopropanepropanoic acid,  $\alpha$ -amino-1-carboxy- $\alpha$ -(2-methylpropyl)- (9CI) (CA INDEX NAME)



RN 188548-32-5 CAPLUS

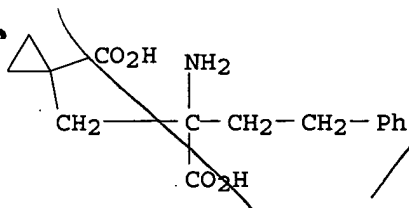
CN Phenylalanine,  $\alpha$ -[(1-carboxycyclopropyl)methyl]-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 188548-33-6 CAPLUS

CN Benzenebutanoic acid,  $\alpha$ -amino- $\alpha$ -[(1-carboxycyclopropyl)methyl]- (9CI) (CA INDEX NAME)



RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 24 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1996:380900 CAPLUS

DN 125:59041

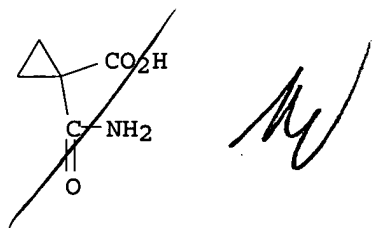
TI Synthesis of 1-aminocyclopropane-1-carboxylic acid

AU Il'yasov, E. A.; Galust'yan, G. G.

CS Inst. Khim. Rastit. Veshchestv, AN RUz, Tashkent, Uzbekistan

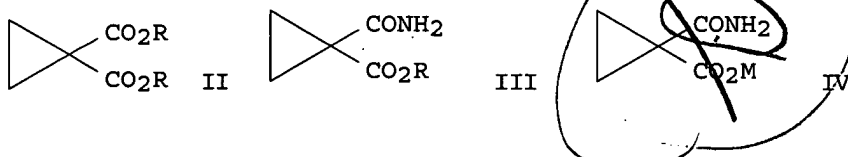
10760032-R3 AND R4 NON CICYC

SO Khimiya Prirodnikh Soedinenii (1995), (6), 855-857  
CODEN: KPSUAR; ISSN: 0023-1150  
PB Fan  
DT Journal  
LA Russian  
AB 1-Amino-1-cyclopropanecarboxylic acid was prepared by alkylation of Et  
cyanoacetate with 1,2-dibromoethane, followed treatment solns. containing  
NaOH, H<sub>2</sub>O<sub>2</sub>, and Br<sub>2</sub>-NaOH.  
IT 6914-74-5  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(synthesis of aminocyclopropanecarboxylic acid)  
RN 6914-74-5 CAPLUS  
CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)- (9CI) (CA INDEX NAME)



L3 ANSWER 25 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 1995:954752 CAPLUS  
DN 123:339204  
TI Preparation of 1-aminocyclopropane carboxylic acid hydrochloride.  
IN Kleemiss, Wolfgang; Feld, Marcel  
PA Huels A.-G., Germany  
SO Eur. Pat. Appl., 8 pp.  
CODEN: EPXXDW  
DT Patent  
LA German  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 676390	A1	19951011	EP 1995-101384	19950202
	EP 676390	B1	19970102		
	R: CH, DE, ES, FR, GB, IT, LI				
	DE 4411777	A1	19951012	DE 1994-4411777	19940406
	JP 07278077	A2	19951024	JP 1995-79191	19950404
	US 5569781	A	19961029	US 1995-416989	19950405
PRAI	DE 1994-4411777	A	19940406		
OS	CASREACT 123:339204; MARPAT 123:339204				
GI					



AB Title compound (I) was prepared from diesters (II; R = C1-8 alkyl) via  
ester-amides (III) and amide-salts (IV; M = alkali- or alkaline earth metal).  
Thus, II (R = Me) in MeOH was treated 10 h with NH<sub>3</sub> at 20° to give  
92.5% III (R = Me). This was heated with aqueous NaOH at 40° for 20  
min. and the resulting homogeneous solution was added with aqueous NaOCl over  
1 h  
to a mixing vessel and conducted through a tube reactor at 80°  
followed by acidification with HCl to give 80% I.

10760032-R3 AND R4 NON CICLYC

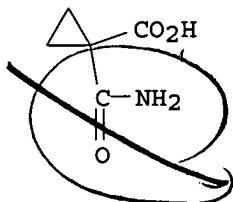
IT 6914-74-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 1-aminocyclopropane carboxylic acid hydrochloride from 1,1-cyclopropanedicarboxylate diesters)

RN 6914-74-5 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)- (9CI) (CA INDEX NAME)



L3 ANSWER 26 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1995:15890 CAPLUS

DN 122:81918

TI Syntheses of conformationally constrained glutamate analogs

AU Shimamoto, K.; Raghavan, S.; Ouerfelli, O.; Ohfuné, Y.

CS Suntory Inst. Bioorg. Res., Japan

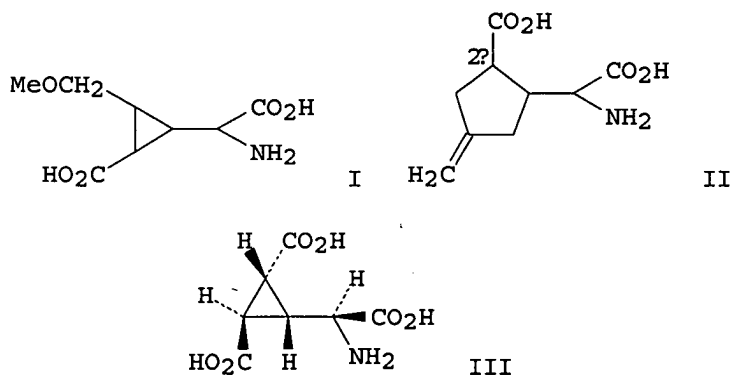
SO Tennen Yuki Kagobutsu Toronkai Koen Yoshishu (1993), 35th, 559-66

CODEN: TYKYDS

DT Journal

LA Japanese

GI



AB Six diastereomers of 2-(2-carboxy-3-methoxymethylcyclopropyl)glycine I, 3 diastereomers of 2-(2-carboxy-4-methylenecyclopentyl)glycine II, 3 analogs of 4-substituted glutamic acids, and 2-(2,3-dicarboxycyclopropyl)glycine III were prepared to examine the conformational requirements of Glu receptors as well as to develop new Glu agonists. The syntheses of I were characterized by (1) intramol. cyclopropanation of diazoacetamides with (E)- or (Z)-allyl ethers and (2) inversion of cis-substituted  $\alpha$ -cyclopropyl acyl anion to the trans ester. Palladium catalyzed [3+2] cycloaddn. of (E)- or (Z)- $\alpha,\beta$ -unsatd. trifluoroethyl esters with a trimethylenemethane equivalent furnished the desired cycloadducts which were converted to the 2'R isomers II. (2'S)-II was prepared by the stereoselective 1,4-addition of a trimethylenemethane species to a (Z)-ester. Aminocarbonylation of the propargylglycine derivative prepared

from L-aspartic acid gave the 4-methyleneglutamic acid derivative which was used for the syntheses of 4-substituted glutamic acids. The synthesis of III was carried out starting from a common trans ester synthetic intermediate of I. Cis-cyclopropyl-substituted I (cis-I), which freeze the rotation of the  $\alpha$ -amino acid moiety, showed similar activities to their parent (carboxycyclopropyl)glycines, suggesting the conformation of  $\alpha$ -amino acid moiety of Glu for activating metabotropic receptors and N-methyl-D-aspartate (NMDA) receptors. Trans-I and II were classified as kainate (KA) receptor agonists. Their conformational relationship suggests that the folded form of Glu is also responsible for activating KA receptors. Moreover, III was a potent and selective metabotropic receptor agonist.

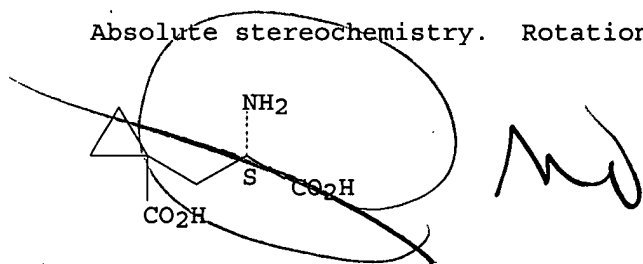
IT 151139-87-6

RL: RCT (Reactant); RACT (Reactant or reagent)  
(glutamate receptor agonist activity of)

RN 151139-87-6 CAPLUS

CN Cyclopropanepropanoic acid,  $\alpha$ -amino-1-carboxy-, (S)- (9CI) (CA  
INDEX NAME)

Absolute stereochemistry. Rotation (+).



L3 ANSWER 27 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1994:655267 CAPLUS

DN 121:255267

TI A convenient synthesis of methyl (Z)-1-carbamoyl-2-ethenylcyclopropanecarboxylate and (Z)-1-carbamoyl-2-ethenylcyclopropanecarboxylic acid

AU Galgoci, Michelle; Davidson, Janel E.; Harrington, Clinton K.; Hasha, Dennis L.; Goralski, Christian T.

CS Dow Chemical Co., Midland, MI, 48674, USA

SO Synthetic Communications (1994), 24(17), 2477-83  
CODEN: SYNCAV; ISSN: 0039-7911

DT Journal

LA English

OS CASREACT 121:255267

AB A simple method for the preparation of the title compds. via the reaction of di-Me 2-ethenylcyclopropane-1,1-dicarboxylate with 6M ammonia in methanol is described.

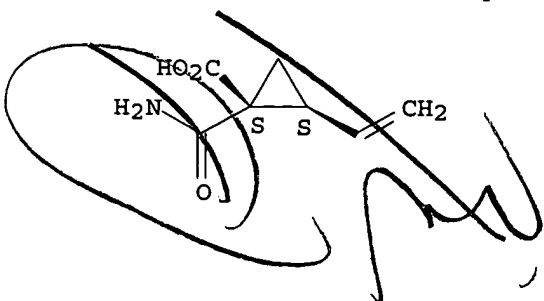
IT 158665-23-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 158665-23-7 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)-2-ethenyl-, cis- (9CI) (CA  
INDEX NAME)

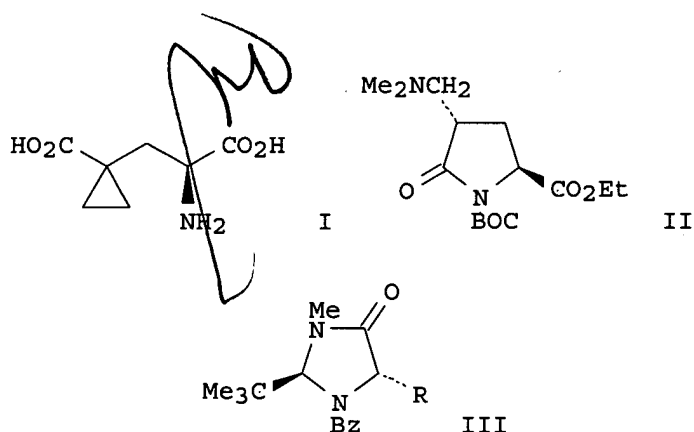
Relative stereochemistry.





10760032-R3 AND R4 NON CICLYC

L3 ANSWER 28 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 1994:631298 CAPLUS  
DN 121:231298  
TI Efficient synthesis of 4-methylene-L-glutamic acid and its cyclopropyl analog  
AU Ezquerro, Jesus; Pedregal, Concepcion; Mico, Irene; Najera, Carmen  
CS Cent. Invest. Lilly S. A., Valdeolmos, 28130, Spain  
SO Tetrahedron: Asymmetry (1994), 5(5), 921-6  
CODEN: TASYE3; ISSN: 0957-4166  
DT Journal  
LA English  
OS CASREACT 121:231298  
GI



AB Title compds. L-NHCH(CO2H)CH2C(CO2H):CH2 and cyclopropyl analog I were obtained from protected pyroglutamate Boc-pGlu-OEt (Boc = Me3CO2C) in 2 and 3 steps, resp. Key methylenepyroglutamate intermediate II was prepared by reaction of the protected pyroglutamate lithium lactam enolate with Eschenmoser's salt. Cyclopropyl derivative I was also prepared from imidazolidone III (R = H) in 3 steps. The intermediate III [R = CH2C(CO2Bu):CH2] was obtained by diastereoselective reaction of the lithium enolate of III (R = H) with Bu (2-tosylmethyl)acrylate.

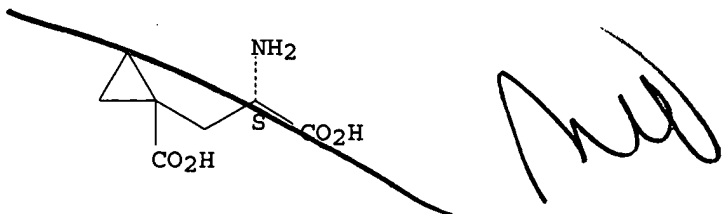
IT 158196-44-2P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 158196-44-2 CAPLUS

CN Cyclopropanepropanoic acid,  $\alpha$ -amino-1-carboxy-, hydrochloride, (S)-  
(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



● HCl

10760032-R3 AND R4 NON CICYC

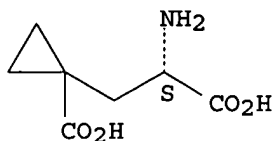
IT 151139-87-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, from pyroglutamic acid)

RN 151139-87-6 CAPLUS

CN Cyclopropanepropanoic acid,  $\alpha$ -amino-1-carboxy-, (S)- (9CI) (CA  
INDEX NAME)

Absolute stereochemistry. Rotation (+).



L3 ANSWER 29 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1993:650414 CAPLUS

DN 119:250414

TI Efficient synthesis of 4-methylene-L-glutamic acid and its analogs

AU Ouerfelli, Ouathek; Ishida, Michiko; Shinozaki, Haruhiko; Nakanishi, Koji;  
Ohfune, Yasufumi

CS Suntory Inst. Bioorg. Res., Osaka, 618, Japan

SO Synlett (1993), (6), 409-10

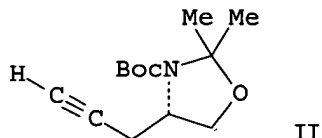
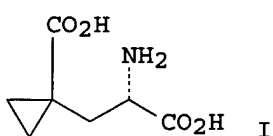
CODEN: SYNLES; ISSN: 0936-5214

DT Journal

LA English

OS CASREACT 119:250414

GI



AB Three analogs of 4,4-disubstituted L-glutamate, (S)-  
H<sub>2</sub>C:C(CO<sub>2</sub>C)CH<sub>2</sub>CH(NH<sub>2</sub>)CO<sub>2</sub>H, (S)-HO<sub>2</sub>CCMe<sub>2</sub>CH<sub>2</sub>CH(NH<sub>2</sub>)CO<sub>2</sub>H, and cyclopropane I,  
were prepared via a regioselective aminocarbonylation of optically active  
propargylglycine equivalent II prepared from Boc-L-Asp(OCH<sub>2</sub>Ph)-OH (Boc =  
Me<sub>3</sub>CO<sub>2</sub>C).

IT 151139-87-6P

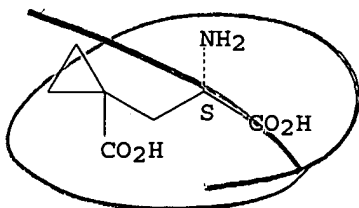
RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, via regioselective aminocarbonylation of propargylglycine  
synthon)

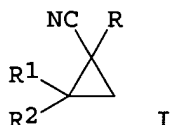
RN 151139-87-6 CAPLUS

CN Cyclopropanepropanoic acid,  $\alpha$ -amino-1-carboxy-, (S)- (9CI) (CA  
INDEX NAME)

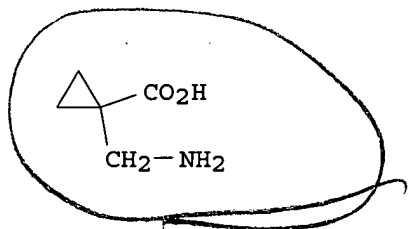
Absolute stereochemistry. Rotation (+).



L3 ANSWER 30 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1992:105655 CAPLUS  
 DN 116:105655  
 TI Novel synthesis of 1-cyanocyclopropanecarboxylic acid and its application  
 to the synthesis of amino acids containing cyclopropane rings  
 AU Ohno, Mitsuru; Tanaka, Haruhisa; Komatsu, Mitsuo; Ohshiro, Yoshiki  
 CS Fac. Eng., Osaka Univ., Suita, 565, Japan  
 SO Synlett (1991), (12), 919-20  
 CODEN: SYNLES; ISSN: 0936-5214  
 DT Journal  
 LA English  
 OS CASREACT 116:105655  
 GI



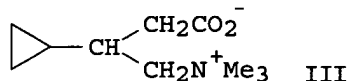
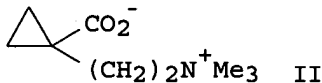
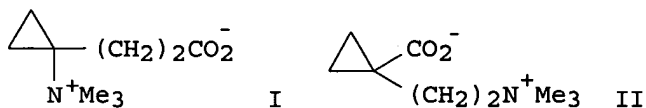
AB 1-Cyano-1-trimethylsilylcyclopropanes I (R = SiMe<sub>3</sub>, R<sub>1</sub> = R<sub>2</sub> = H, Ph; R<sub>1</sub> = Ph, R<sub>2</sub> = H) were efficiently converted to 1-cyanocyclopropane-1-carboxylic acids I (R = CO<sub>2</sub>H, R<sub>1</sub>, R<sub>2</sub> = same) in the presence of a fluoride ion source (CsF) under CO<sub>2</sub> atmosphere. This transformation provides a novel route to 1-aminocyclopropane-1-carboxylic acid, which is found in many plants, and to its homolog (1-aminomethylcyclopropane-1-carboxylic acid).  
 IT 139126-45-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 139126-45-7 CAPLUS  
 CN Cyclopropanecarboxylic acid, 1-(aminomethyl)- (9CI) (CA INDEX NAME)



102(b)

↑  
 103  
 ↓

L3 ANSWER 31 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1990:212931 CAPLUS  
 DN 112:212931  
 TI Inhibition of  $\gamma$ -butyrobetaine hydroxylase by cyclopropyl-substituted  
 $\gamma$ -butyrobetaines  
 AU Petter, Russell C.; Banerjee, Satyajit; England, Sasha  
 CS Dep. Chem., Univ. Pittsburgh, Pittsburgh, PA, 15260, USA  
 SO Journal of Organic Chemistry (1990), 55(10), 3088-97  
 CODEN: JOCEAH; ISSN: 0022-3263  
 DT Journal  
 LA English  
 OS CASREACT 112:212931  
 GI



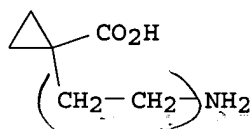
AB  $\gamma$ -Butyrobetaine hydroxylase EC 1.14.11.1) of *Pseudomonas* sp. AK1 catalyzes the final step in the biosynthesis of carnitine. A stepwise, homolytic mechanism has previously been proposed. Cyclopropyl-substituted substrate analogs, I, II, and III, were synthesized and evaluated as inhibitors of the enzyme with a view toward their potential as free radical clock probes for radical transients. Betaines I and III were competitive inhibitors and provided  $K_i$  values of 12.9 and 7.9 mM, resp. Betaine II was a noncompetitive inhibitor with  $K_{ii}$  of 1.54 mM and for  $K_{is}$  of 1.96 mM. In each case, enzyme activity was determined by measurement of (a) the  $^{14}\text{CO}_2$  liberated from the coupled decarboxylation of [1- $^{14}\text{C}$ ]-2-oxoglutarate and (b) the 3H released into the aqueous medium from [2,3-3H]- $\gamma$ -butyrobetaine added as substrate. None of the 3 cyclopropyl derivs. exhibited turnover, and preincubation of these substrate analogs with  $\gamma$ -butyrobetaine hydroxylase did not result in a time-dependent loss of activity greater than that of the controls. The results were discussed in terms of the conformations of the inhibitors relative to those of the substrate.

IT 126822-37-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and methylation of)

RN 126822-37-5 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(2-aminoethyl)- (9CI) (CA INDEX NAME)



(103) analog

L3 ANSWER 32 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1989:134732 CAPLUS

DN 110:134732

TI Synthesis of 1-aminocyclopropane-1-carboxylic acid by phase transfer method

AU Guo, Shuhao; Du, Ruli

CS Dep. Chem., Jinan Univ., Guangzhou, Peop. Rep. China

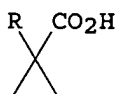
SO Jinan Liyi Xuebao (1988), (1), 106-8

CODEN: J LXUDG; ISSN: 0255-8289

DT Journal

LA Chinese

GI



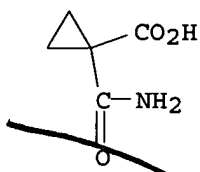
an extra 'CH2'

AB Phase-transfer reaction of NCCH<sub>2</sub>CO<sub>2</sub>Et with BrCH<sub>2</sub>CH<sub>2</sub>Br gave 86.5% cyclopropane I (R = cyano), hydrolysis of which gave 84.0% amide I (R = CONH<sub>2</sub>). Phase-transfer Hofmann reaction of the latter compound gave 80.3% the title compound (I, R = NH<sub>2</sub>).

IT **6914-74-5P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and Hofmann reaction of)

RN 6914-74-5 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)- (9CI) (CA INDEX NAME)



L3 ANSWER 33 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1988:528440 CAPLUS

DN 109:128440

TI Preparation of 1-aminocyclopropane-1-carboxylic acid

IN Davidovich, Yu. A.; Shtil'man, M. I.; Kornakov, M. Ya.

PA Institute of Heteroorganic Compounds, Academy of Sciences, USSR, USSR

SO U.S.S.R.  
 From: Otkrytiya, Izobret. 1987, (20), 102.  
 CODEN: URXXAF

DT Patent

LA Russian

FAN.CNT 1

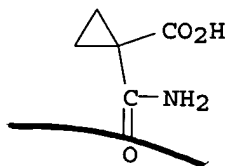
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	SU 1313851	A1	19870530	SU 1985-3886907	19850418
PRAI	SU 1985-3886907		19850418		

AB Reaction of di-Et malonate and BrCH<sub>2</sub>CH<sub>2</sub>Br in the presence of K<sub>2</sub>CO<sub>3</sub> gives di-Et cyclopropane-1,1-dicarboxylate. This is then hydrolyzed and converted to the monoamide which undergoes Hofmann reaction to give the title compound

IT **6914-74-5P**, Cyclopropane-1,1-dicarboxylic acid monoamide  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and Hofmann reaction of)

RN 6914-74-5 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)- (9CI) (CA INDEX NAME)



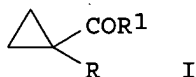
L3 ANSWER 34 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1985:614881 CAPLUS

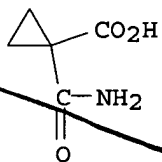
DN 103:214881

10760032-R3 AND R4 NON CICYC

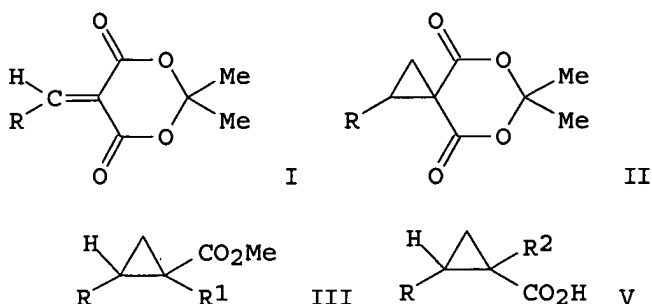
TI Synthesis of 1-aminocyclopropane-1-carboxylic acid - a new type of plant growth regulator  
AU Zhu, Xuxiang; Guo, Qizhen  
CS Dep. Chem., Xiamen Univ., Xiamen, Peop. Rep. China  
SO Youji Huaxue (1985), (2), 153-5  
CODEN: YCHHDX; ISSN: 0253-2786  
DT Journal  
LA Chinese  
OS CASREACT 103:214881  
GI



AB The title compound (I; R = NH<sub>2</sub>, R<sub>1</sub> = OH) was prepared either by cyclocondensation of MeCOCH<sub>2</sub>CO<sub>2</sub>Et with BrCH<sub>2</sub>CH<sub>2</sub>Br, then aminolysis of I (R = CO<sub>2</sub>Et, R<sub>1</sub> = Me), followed by Hofmann and haloform reactions of I (R = CONH<sub>2</sub>, R<sub>1</sub> = Me) in 10% total yield; or by cyclocondensation of NCCH<sub>2</sub>CO<sub>2</sub>Et with BrCH<sub>2</sub>CH<sub>2</sub>Br, then hydrolysis of I (R = cyano, R<sub>1</sub> = OEt), followed by Hofmann reaction of I (R = CONH<sub>2</sub>, R<sub>1</sub> = OH) in 45% total yield. The latter method is applicable for industrial manufacture of the title compound  
IT 6914-74-5P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and Hofmann reaction of)  
RN 6914-74-5 CAPLUS  
CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)- (9CI) (CA INDEX NAME)



L3 ANSWER 35 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 1985:453711 CAPLUS  
DN 103:53711  
TI Synthesis of E- and Z-1-amino-2-aryl(alkyl)cyclopropanecarboxylic acids via meldrum derivatives  
AU Izquierdo, M. L.; Arenal, I.; Bernabe, M.; Fernandez Alvarez, E.  
CS Inst. Quim. Org. Gen., CSIC, Madrid, 6, Spain  
SO Tetrahedron (1985), 41(1), 215-20  
CODEN: TETRAB; ISSN: 0040-4020  
DT Journal  
LA English  
OS CASREACT 103:53711  
GI



AB Meldrum acid derivs. I (R = Ph, 3-ClC<sub>6</sub>H<sub>4</sub>, 4-FC<sub>6</sub>H<sub>4</sub>, 4-MeOC<sub>6</sub>H<sub>4</sub>, etc.) were treated with CH<sub>2</sub>SOMe<sub>2</sub> to give dioxaspiro[2,5]octanes II, which were treated with NaOMe or NH<sub>4</sub>OH to give cyclopropanes III (R<sub>1</sub> = CO<sub>2</sub>H) (IV) and V (R<sub>2</sub> = CONH<sub>2</sub>) (VI), resp. IV underwent Curtius-type reactions to give III (R<sub>1</sub> = NCO) (VII), whereas VI were treated with hypobromite to give V (R<sub>2</sub> = NHAc) (VIII). VII and VIII were hydrolyzed to give the corresponding 1-amino-1-cyclopropanecarboxylic acid derivative

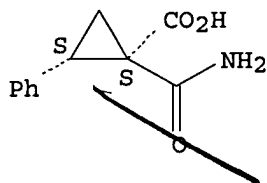
IT 97364-47-1P 97364-48-2P 97364-49-3P  
97364-50-6P 97364-51-7P 97364-52-8P  
97364-53-9P 97364-54-0P 97364-55-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 97364-47-1 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)-2-phenyl-, cis- (9CI) (CA INDEX NAME)

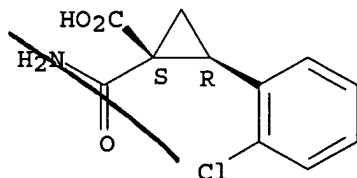
Relative stereochemistry.



RN 97364-48-2 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)-2-(2-chlorophenyl)-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

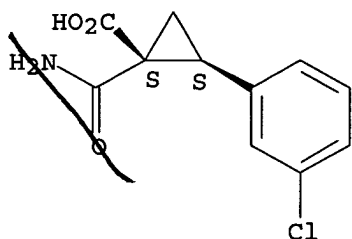


RN 97364-49-3 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)-2-(3-chlorophenyl)-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

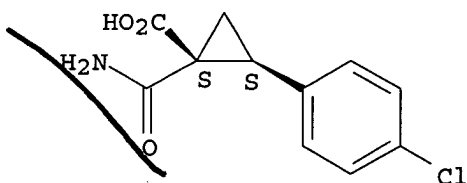
10760032-R3 AND R4 NON CICYLC



RN 97364-50-6 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)-2-(4-chlorophenyl)-, cis-  
(9CI) (CA INDEX NAME)

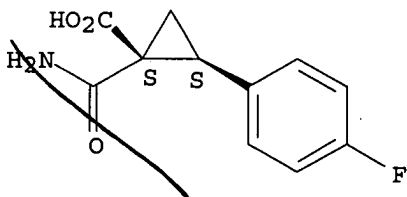
Relative stereochemistry.



RN 97364-51-7 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)-2-(4-fluorophenyl)-, cis-  
(9CI) (CA INDEX NAME)

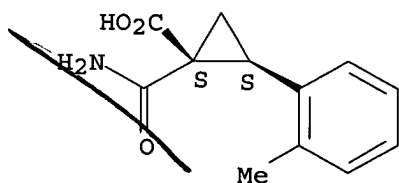
Relative stereochemistry.



RN 97364-52-8 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)-2-(2-methylphenyl)-, cis-  
(9CI) (CA INDEX NAME)

Relative stereochemistry.



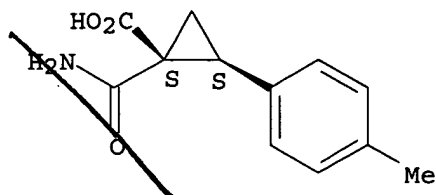
RN 97364-53-9 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)-2-(4-methylphenyl)-, cis-  
(9CI) (CA INDEX NAME)

Relative stereochemistry.



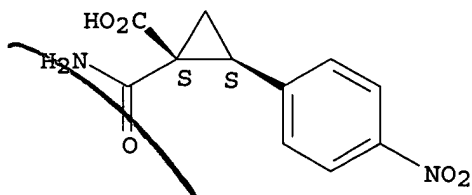
10760032-R3 AND R4 NON CICLYC



RN 97364-54-0 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)-2-(4-nitrophenyl)-, cis- (9CI) (CA INDEX NAME)

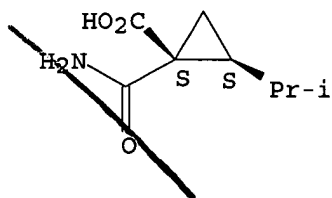
Relative stereochemistry.



RN 97364-55-1 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)-2-(1-methylethyl)-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.



L3 ANSWER 36 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1984:506417 CAPLUS

DN 101:106417

TI Stereochemical studies on the reactions catalyzed by the PLP-dependent enzyme 1-aminocyclopropane-1-carboxylate deaminase

AU Liu, Hungwen; Auchus, Richard; Walsh, Christopher T.

CS Dep. Chem., Massachusetts Inst. Technol., Cambridge, MA, 02139, USA

SO Journal of the American Chemical Society (1984), 106(18), 5335-48

CODEN: JACSAT; ISSN: 0002-7863

DT Journal

LA English

OS CASREACT 101:106417

AB The stereochem. course of 1-aminocyclopropane-1-carboxylate (ACPC) deaminase, which catalyzes the fragmentation of the cyclopropane substrate to  $\alpha$ -ketobutyrate and  $\text{NH}_3$ , was studied by using substrates stereospecifically labeled with deuterium and(or) tritium; important information about the process occurring at the active site during enzymic conversion was thus obtained. These results can be summarized as follows: (1) ring cleavage is regiospecific and only occurs between the pro-S and the  $\alpha$ -C atom of ACPC; (2)  $\beta$ -H abstraction is pro-R stereospecific and the reprotonation at the  $\beta$ -C atom is mediated by the same enzyme base which is partially shielded and located at the si face relative to the  $\alpha$ -C atom; (3) the preferred conformation of the

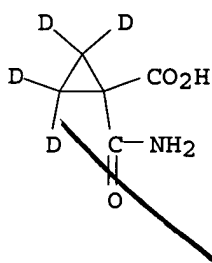
$\beta,\gamma$ -olefinic pyridoxal 5'-phosphate-p-quinoid  $\alpha$ -anion complex is cisoid, and the geometry of the terminal double bond, if trisubstituted, favors E, whereas the major conformation of the nascent intermediate, aminocrotonate, is z (defined as relative to the amino group); and (4) protonation at C-4 is mediated by a different enzyme base which is not shielded and is situated at the si face with respect to the  $\alpha$ -C atom.

IT 91366-30-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and reaction with bromine and sodium hydroxide)

RN 91366-30-2 CAPLUS

CN Cyclopropane-2,2,3,3-d4-carboxylic acid, 1-(aminocarbonyl)- (9CI) (CA INDEX NAME)



L3 ANSWER 37 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1971:551666 CAPLUS

DN 75:151666

TI 5-Azaspiro[2.4]heptane-4,6-diones

IN German, Victor F.

PA A. H. Robins Co., Inc.

SO Ger. Offen., 25 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2103576	A	19710826	DE 1971-2103576	19710126
	US 3654306	A	19720404	US 1970-5904	19700126
	ES 386409	A1	19731201	ES 1970-386409	19701212
	GB 1307341	A	19730221	GB 1971-1497	19710112
	CA 942753	A1	19740226	CA 1971-103115	19710119
	ZA 7100471	A	19711124	ZA 1971-471	19710125
	FR 2081459	A1	19711203	FR 1971-2365	19710125
	FR 2081459	A5	19711203		
	CH 547798	A	19740411	CH 1971-1078	19710125
PRAI	US 1970-5904	A	19700126		

GI For diagram(s), see printed CA Issue.

AB Title compds. (I), useful as diuretics and intermediates for antidepressant 5-azaspiro[2.4]heptanes, were prepared from MeO<sub>2</sub>CCH<sub>2</sub>C(:CH<sub>2</sub>)CO<sub>2</sub>Me (II) by reaction with diazomethanes CRPhN<sub>2</sub> (III) to give Me  $\alpha$ -[1-(carbomethoxy)-2-R,2-Ph-disubstituted-cyclopropyl]acetates, followed by hydrolysis and cyclization to give 1-R,1-Ph-disubstituted 5-oxaspiro[2.4]heptane-4,6-diones (IV), subsequent reaction with R<sub>1</sub>NH<sub>2</sub>, and cyclization. I were also prepared from itaconic anhydride (V) by reaction with R<sub>1</sub>NH<sub>2</sub> to give R<sub>1</sub>NHCOCH<sub>2</sub>C(:CH<sub>2</sub>)CO<sub>2</sub>H, followed by cyclization, and reaction with III. Thus, II reacted with p-MeC<sub>6</sub>H<sub>4</sub>CPhN<sub>2</sub> in Et<sub>2</sub>O 3 days at room temperature to give Me  $\alpha$ -[1-(carbomethoxy)-2-phenyl-2-(p-tolyl)cyclopropyl]acetate, which was refluxed with KOH in EtOH 6 hr. The reaction product was refluxed with Ac<sub>2</sub>O to

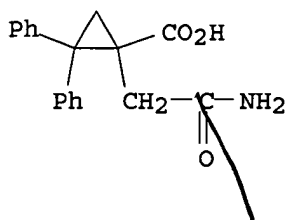
give IV (R=p-tolyl), which was treated with urea to give I (R=p-MeC<sub>6</sub>H<sub>4</sub>, R<sub>1</sub>=H). V was treated with III (R=p-tolyl) to give 90% IV (R=p-tolyl). V was treated with PhNH<sub>2</sub> at 5-10° in ether to give 81% 2-methylenesuccinanilide, which was treated with NaOAc and Ac<sub>2</sub>O 1 hr at 50° to give 40% N-phenyl-2-methylenesuccinimide, which was treated with CPh<sub>2</sub>N<sub>2</sub> in ether to give 64% I (R=R<sub>1</sub>=Ph). Similarly prepared were I (R=Ph, R<sub>1</sub> given): H, CH<sub>2</sub>Ph, Me, CH<sub>2</sub>CH<sub>2</sub>Ph, Ph, Et and I (R=p-MeOC<sub>6</sub>H<sub>4</sub>, R<sub>1</sub>=H).

IT 34105-37-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 34105-37-8 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(carbamoylmethyl)-2,2-diphenyl- (8CI) (CA INDEX NAME)



L3 ANSWER 38 OF 38 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1966:18555 CAPLUS

DN 64:18555

OREF 64:3322c-f

TI N.M.R. study of cyclopropane. I. Investigation of certain cyclopropane derivatives by nuclear magnetic resonance

AU Pavia, Andre Armand; Wylde, James; Wylde, Renee; Arnal, Elian

CS Ecole Natl. Super. Chim., Montpellier

SO Bulletin de la Societe Chimique de France (1965), (10), 2709-18

CODEN: BSCFAS; ISSN: 0037-8968

DT Journal

LA French

AB Relatively simple 1,1-disubstituted and 1,1,2,2-tetrasubstituted cyclopropane derivs. were prepared and studied by N.M.R. The variation of the chemical shift and the coupling consts. of the protons were studied as a function of the attracting power of the electrons of the substituents of the ring. For substituents such as CN or Ph, which exert a strong long distance effect, the anisotropy correction must be used if the measured chemical shifts are to correctly express the attracting power of these groups. Exptl. results obtained showed a very definite variation of the chemical shifts as a function of the substituent. The Taft coupling consts. were used to measure the attracting power of the substituents. The decrease of magnetic protection or deshielding by the attracting effect of the electrons was less than, but of the same order of magnitude, as that measured for unsatd. compds. This observation favors a pseudo-unsatd. structure for cyclopropane. The greater polarizability of the electronic structure can partly explain the relative ease of cyclopropane to transmit electronic effects. Math. proof is given to confirm the hypothesis that, in cyclopropane esters, the cis  $\beta$  protons absorb in weaker fields than the trans protons. The equation which quant. evaluates the long distance effect of the triple bond contains all the parameters determining the reciprocal position of the substituents and the parameters belonging to the involved bond:  $\Delta\omega = 1/3 \Delta\chi(3 \cos 2\alpha - 1)R^{-3}$  where  $\Delta\omega$  is the displacement in cycles/sec. to be evaluated, R is the distance between the center of the triple bond and the proton considered,  $\alpha$  is the angle between the axis of the triple bond and the line joining the center of the triple bond and the proton considered,

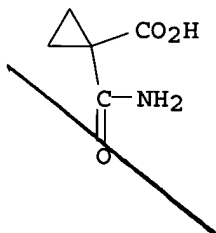
10760032-R3 AND R4 NON CICYC

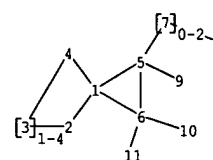
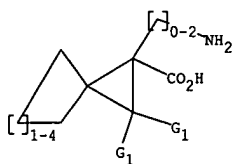
and  $\Delta\chi = \chi_L - \chi_T$  measures the magnetic susceptibility of the triple bond.

IT 6914-74-5, Cyclopropanecarboxylic acid, 1-carbamoyl-  
(nuclear magnetic resonance of)

RN 6914-74-5 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(aminocarbonyl)- (9CI) (CA INDEX NAME)





*R<sub>1</sub> R<sub>2</sub> cyclic  
from C<sub>4</sub> to C<sub>7</sub>*

chain nodes :

7 8 9 10 11

ring nodes :

1 2 3 4 5 6

chain bonds :

5-7 5-9 6-10 6-11 7-8

ring bonds :

1-2 1-4 1-5 1-6 2-3 3-4 5-6

exact/norm bonds :

1-2 1-4 1-5 1-6 2-3 3-4 5-6 6-10 6-11 7-8

exact bonds :

5-7 5-9

G1:C,H,CH3

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS  
11:CLASS

10760032-R3 AND R4 NON CICLYC

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NEWS 6 DEC 01 LISA now available on STN  
NEWS 7 DEC 09 12 databases to be removed from STN on December 31, 2004  
NEWS 8 DEC 15 MEDLINE update schedule for December 2004  
NEWS 9 DEC 17 ELCOM reloaded; updating to resume; current-awareness  
alerts (SDIs) affected  
NEWS 10 DEC 17 COMPUAB reloaded; updating to resume; current-awareness  
alerts (SDIs) affected  
NEWS 11 DEC 17 SOLIDSTATE reloaded; updating to resume; current-awareness  
alerts (SDIs) affected  
NEWS 12 DEC 17 CERAB reloaded; updating to resume; current-awareness  
alerts (SDIs) affected  
NEWS 13 DEC 17 THREE NEW FIELDS ADDED TO IFIPAT/IFIUDB/IFICDB  
NEWS 14 DEC 30 EPFULL: New patent full text database to be available on STN  
NEWS 15 DEC 30 CAPLUS - PATENT COVERAGE EXPANDED  
NEWS 16 JAN 03 No connect-hour charges in EPFULL during January and  
February 2005  
NEWS 17 JAN 26 CA/CAPLUS - Expanded patent coverage to include the Russian  
Agency for Patents and Trademarks (ROSPATENT)  
NEWS 18 FEB 10 STN Patent Forums to be held in March 2005  
  
NEWS EXPRESS JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT  
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005  
  
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NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
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\* \* \* \* \* STN Columbus \* \* \* \* \*

10760032-R3 AND R4 NON CICLYC

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SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

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0.21

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DICTIONARY FILE UPDATES: 9 FEB 2005 HIGHEST RN 828241-21-0

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<http://www.cas.org/ONLINE/DBSS/registryss.html>

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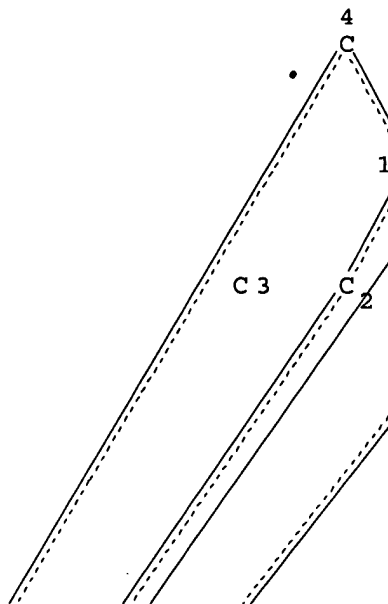
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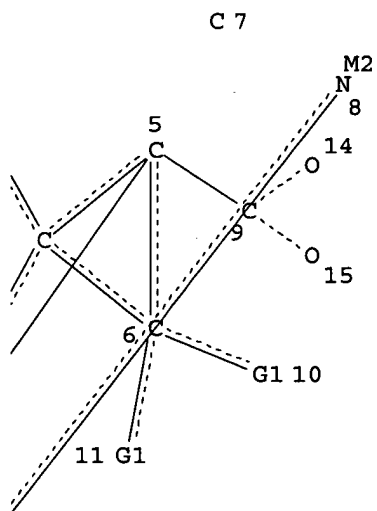
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10760032-R3 AND R4 NON CICLYC

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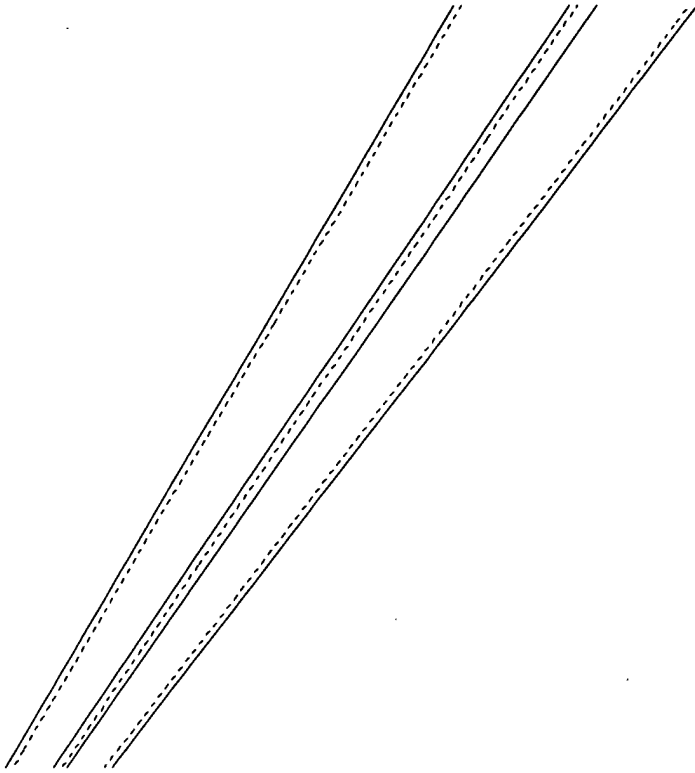
Page 1-A



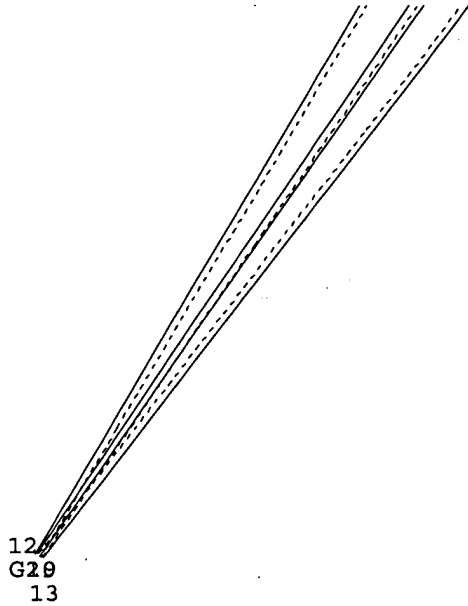
Page 1-B



10760032-R3 AND R4 NON CICLYC



Page 2-A



12  
G29  
13

Page 3-A

VAR G1=16/17/18

REP G19=(1-4) 3-2 3-4

REP G20=(0-2) 7-5 7-8

NODE ATTRIBUTES:

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HCOUNT	IS	M3	AT	18
NSPEC	IS	R	AT	1

10760032-R3 AND R4 NON CICLYC

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NSPEC IS R AT 3  
NSPEC IS R AT 4  
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NSPEC IS C AT 14  
NSPEC IS C AT 15  
DEFAULT MLEVEL IS ATOM  
MLEVEL IS CLASS AT 7 8 9 14 15 16 17 18  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 18

STEREO ATTRIBUTES: NONE

=> S L1 FULL  
FULL SEARCH INITIATED 15:16:25 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 191 TO ITERATE

100.0% PROCESSED 191 ITERATIONS 16 ANSWERS  
SEARCH TIME: 00.00.01

L2 16 SEA SSS FUL L1

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ENTRY	SESSION
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FULL ESTIMATED COST

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FILE LAST UPDATED: 9 Feb 2005 (20050209/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

10760032-R3 AND R4 NON CICLYC

=> S L2 FULL

L3 4 L2

=> D 1-4 BIB ABS HITSTR L3

L3 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:756699 CAPLUS

DN 141:277627

TI Preparation of tetrazole and oxadiazolone substituted  $\beta$ -amino acid derivatives as ligands of the  $\alpha 2\delta$ -subunit of a calcium channel

IN Barta, Nancy Sue; Gellery, Norman Lloyd; Hudack, Raymond Andrew, Jr.; Lin, Kristin Knapp; Schwarz, Jacob Bradley; Thorpe, Andrew John; Wustrow, David Juergen; Zhu, Zhijian

PA Warner-Lambert Company LLC, USA

SO PCT Int. Appl., 93 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004078734	A1	20040916	WO 2004-IB510	20040223
W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

US 2005014804

A1

20050120

US 2004-795760

20040308

PRAI US 2003-452871P

P

20030307

OS MARPAT 141:277627

AB Title compds. R2R1(NH2)C-C(G)R3R4 [G = tetrazolyl, 1,3,5-oxadiazol-2-one; R1-2 = H, alkyl, alkoxy, etc.; R3-4 = H, Me; (I)] and related cyclopropane derivs. are prepared For instance, 4-methyl-2-(1H-tetrazol-5-yl)pentylamine is prepared from 1-benzyl-1H-tetrazole and 4-methyl-1-nitropentene in 2 steps. Selected example compds. exhibit binding with nM to  $\mu$ M affinity for  $\alpha 2\delta$ -subunit of the calcium channel (3 biol. examples). I are useful for the treatment of central nervous system and other disorders.

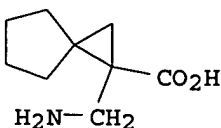
IT 724772-88-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of tetrazole and oxadiazolone substituted  $\beta$ -amino acid derivs. as ligands of  $\alpha 2\delta$ -subunit of a calcium channel for use as CNS agents)

RN 724772-88-7 CAPLUS

CN Spiro[2.4]heptane-1-carboxylic acid, 1-(aminomethyl)- (9CI) (CA INDEX NAME)



NO  
Prior  
art

10760032-R3 AND R4 NON CICLYC

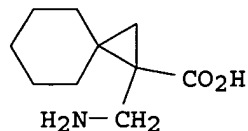
IT 724773-58-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of tetrazole and oxadiazolone substituted  $\beta$ -amino acid derivs. as ligands of  $\alpha 2\delta$ -subunit of a calcium channel for use as CNS agents)

RN 724773-58-4 CAPLUS

CN Spiro[2.5]octane-1-carboxylic acid, 1-(aminomethyl)-, hydrochloride (9CI)  
(CA INDEX NAME)



● HCl

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:612495 CAPLUS

DN 141:123903

TI Preparation of cyclopropyl  $\beta$ -amino acid derivatives for pharmaceutical use

IN Schwarz, Jacob Bradley; Wustrow, David Juergen

PA USA

SO U.S. Pat. Appl. Publ., 22 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

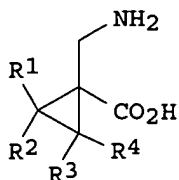
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004147608	A1	20040729	US 2004-760032	20040116
	WO 2004065361	A2	20040805	WO 2004-IB58	20040109
	WO 2004065361	A3	20041007		

W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI

PRAI US 2003-441825P P 20030122

OS MARPAT 141:123903

GI



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10760032-R3 AND R4 NON CICLYC

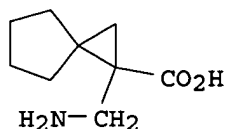
AB The invention relates to novel cyclopropyl  $\beta$ -amino acids derivs. I [R1 and R2 are H, alkyl, alkoxyalkyl, phenylalkyl or phenylalkoxyalkyl, where the Ph moieties can optionally be substituted with one or two halo or alkyl groups; or R1R2C is cyclopentyl, cyclohexyl or cycloheptyl which can be substituted with one or two groups R1/R2; R3, R4 are H or Me] and pharmaceutical compns. containing them for use in the treatment of central nervous system and other disorders. Compds. I exhibit activity as  $\alpha 2\delta$  ligands and have affinity for the  $\alpha 2\delta$  subunit of a calcium channel. Thus, 1-aminomethylspiro[2.5]octane-1-carboxylic acid hydrochloride was prepared by treating cyanocyclohexylideneacetic acid Et ester with nitromethane in MeCN in the presence of DBU, followed by hydrogenation over Raney Ni and hydrolysis with 3N HCl.

IT 724772-88-7P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(preparation of cyclopropyl  $\beta$ -amino acid derivs. for pharmaceutical use)

RN 724772-88-7 CAPLUS

CN Spiro[2.4]heptane-1-carboxylic acid, 1-(aminomethyl)- (9CI) (CA INDEX NAME)

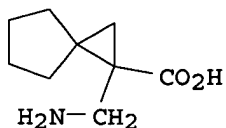


IT 724772-85-4P 724772-86-5P 724772-87-6P  
724772-92-3P 724772-97-8P 724772-98-9P  
724773-02-8P 724773-04-0P 724773-05-1P  
724773-06-2P 724773-07-3P 724773-58-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of cyclopropyl  $\beta$ -amino acid derivs. for pharmaceutical use)

RN 724772-85-4 CAPLUS

CN Spiro[2.4]heptane-1-carboxylic acid, 1-(aminomethyl)-, hydrochloride (9CI)  
(CA INDEX NAME)

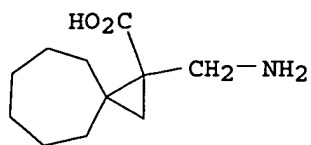


● HCl

RN 724772-86-5 CAPLUS

CN Spiro[2.6]nonane-1-carboxylic acid, 1-(aminomethyl)-, hydrochloride (9CI)  
(CA INDEX NAME)

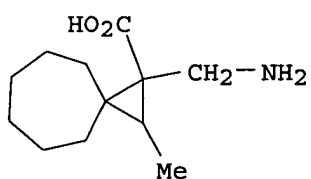
10760032-R3 AND R4 NON CICYC



● HCl

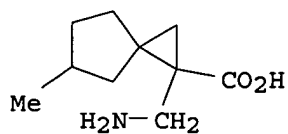
RN 724772-87-6 CAPLUS

CN Spiro[2.6]nonane-1-carboxylic acid, 1-(aminomethyl)-2-methyl- (9CI) (CA INDEX NAME)



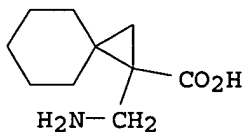
RN 724772-92-3 CAPLUS

CN Spiro[2.4]heptane-1-carboxylic acid, 1-(aminomethyl)-5-methyl- (9CI) (CA INDEX NAME)



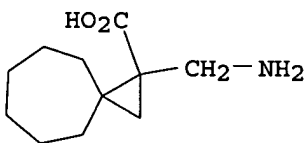
RN 724772-97-8 CAPLUS

CN Spiro[2.5]octane-1-carboxylic acid, 1-(aminomethyl)- (9CI) (CA INDEX NAME)



RN 724772-98-9 CAPLUS

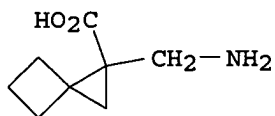
CN Spiro[2.6]nonane-1-carboxylic acid, 1-(aminomethyl)- (9CI) (CA INDEX NAME)



RN 724773-02-8 CAPLUS

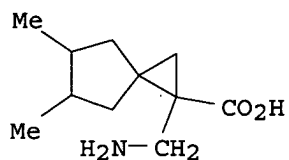
10760032-R3 AND R4 NON CICYC

CN Spiro[2.3]hexane-1-carboxylic acid, 1-(aminomethyl)- (9CI) (CA INDEX NAME)



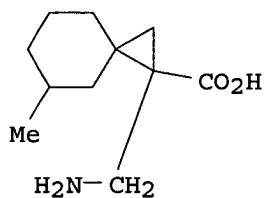
RN 724773-04-0 CAPLUS

CN Spiro[2.4]heptane-1-carboxylic acid, 1-(aminomethyl)-5,6-dimethyl- (9CI) (CA INDEX NAME)



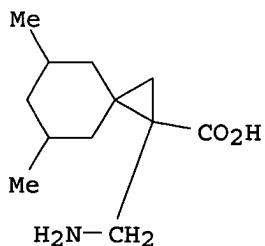
RN 724773-05-1 CAPLUS

CN Spiro[2.5]octane-1-carboxylic acid, 1-(aminomethyl)-5-methyl- (9CI) (CA INDEX NAME)



RN 724773-06-2 CAPLUS

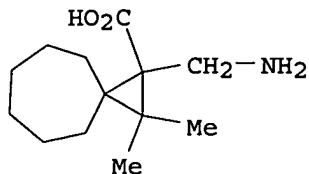
CN Spiro[2.5]octane-1-carboxylic acid, 1-(aminomethyl)-5,7-dimethyl- (9CI) (CA INDEX NAME)



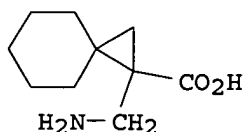
RN 724773-07-3 CAPLUS

CN Spiro[2.6]nonane-1-carboxylic acid, 1-(aminomethyl)-2,2-dimethyl- (9CI) (CA INDEX NAME)

10760032-R3 AND R4 NON CICLYC

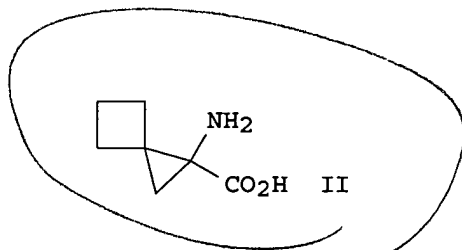
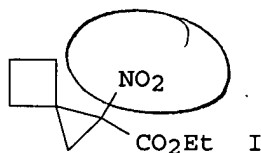


RN 724773-58-4 CAPLUS  
CN Spiro[2.5]octane-1-carboxylic acid, 1-(aminomethyl)-, hydrochloride (9CI)  
(CA INDEX NAME)



● HCl

L3 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2003:807840 CAPLUS  
DN 139:396150  
TI Catalytic cyclopropanation of methylenecyclobutanes using ethyl  
nitrodiazoacetate. Synthesis of spirohexane amino acids  
AU Yashin, Nikolai V.; Averina, Elena B.; Gerdov, Sergei M.; Kuznetsova,  
Tamara S.; Zefirov, Nikolai S.  
CS Department of Chemistry, Moscow State University, Moscow, 119899, Russia  
SO Tetrahedron Letters (2003), 44(45), 8241-8244  
CODEN: TELEAY; ISSN: 0040-4039  
PB Elsevier Science B.V.  
DT Journal  
LA English  
OS CASREACT 139:396150  
GI



*check date  
in library  
2003*

AB The reaction of Et nitrodiazoacetate with a series of  
methylenecyclobutanes was studied and both [1+2]- and [2+3]-cycloaddn.  
pathways were observed depending on olefin structure. Amino acids of a  
spirohexane type were synthesized from methylenecyclobutanes by a  
three-step synthesis. For example, methylenecyclobutane reacted with Et  
nitrodiazoacetate in presence of Rh2(OAc)4 in CH2Cl2 at room temperature to  
give nitro derivative I in 89% yield, which was converted to amino acid II in two  
steps (treatment with HCO2/NH4; -Pd/C-in-MeOH-at-room temperature) with 56%  
yield.

IT 625827-37-4P 625827-39-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of spirohexane amino acids via catalytic cyclopropanation of

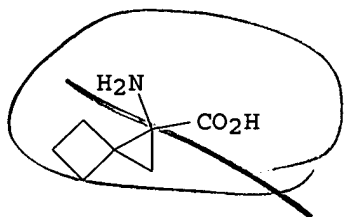


10760032-R3 AND R4 NON CICYLC

methylenecyclobutanes with nitrodiazoacetate)

RN 625827-37-4 CAPLUS

CN Spiro[2.3]hexane-1-carboxylic acid, 1-amino- (9CI) (CA INDEX NAME)

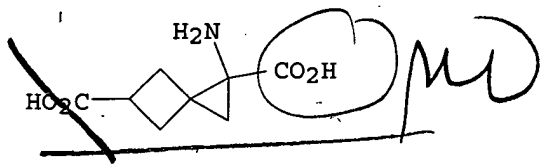


a

"CH<sub>2</sub>" less in the ring and another one in NH<sub>2</sub> group!

RN 625827-39-6 CAPLUS

CN Spiro[2.3]hexane-1,5-dicarboxylic acid, 1-amino- (9CI) (CA INDEX NAME)



RE.CNT -21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1995:231440 CAPLUS

DN 122:10523

TI Straightforward Synthesis of 1-Amino-2,2-dialkylcyclopropanecarboxylic Acids via Selective Saponification of 2,2-Dialkylcyclopropane-1,1-dicarboxylic Esters and Curtius Rearrangement

AU De Kimpe, Norbert; Boeykens, Marc; Tehrani, Kourosh Abbaspour

CS Faculty of Agricultural and Applied Biological Sciences, University of Gent, Ghent, B-9000, Belg.

SO Journal of Organic Chemistry (1994), 59(26), 8215-19

CODEN: JOCEAH; ISSN: 0022-3263

PB American Chemical Society

DT Journal

LA English

OS CASREACT 122:10523

AB Selective monosaponification of di-Me 2,2-dialkylcyclopropane-1,1-dicarboxylic esters afforded the corresponding 2,2-dialkyl-1-(methoxycarbonyl)cyclopropane-1-carboxylic acids, which were rearranged with di-Ph phosphoroazidate via a modified Curtius-type reaction to give Me 2,2-dialkyl-1-(N-(alkoxycarbonyl)amino)cyclopropanecarboxylic esters. Selective deprotection of the carbamate or Me cyclopropanecarboxylic ester was worked out, giving rise to a whole variety of aminocyclopropanecarboxylate analogs.

IT 159279-82-0P

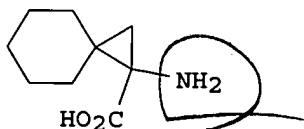
RL: SPN (Synthetic preparation); PREP (Preparation)

(straightforward synthesis of amino(dialkyl)cyclopropanecarboxylic

acids via selective saponification of diesters and Curtius rearrangement)

RN 159279-82-0 CAPLUS

CN Spiro[2.5]octane-1-carboxylic acid, 1-amino- (9CI) (CA INDEX NAME)



103 a "CH<sub>2</sub>" less  
≠ identify

10760032-R3 AND R4 NON CICLYC